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$$X \longrightarrow N \longrightarrow N \longrightarrow R^{2}$$

$$0 = 5 = 0$$

$$X = -CH_2^-, -O^-, ov$$

= $-N^-, -S^-$

$$R', R^2, R^3 = anything$$

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Searcher: Desymanu

Terminal time:

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Number of Searches:

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Search Site

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Pre-S Type of Search

N.A. Sequence

Bibliographic

Structure

Vendors

_____ IG _____ STN

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____ APS

Geninfo
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FILE COVERS 1967 - 10 Mar 1999 VOL 130 ISS 11 FILE LAST UPDATED: 10 Mar 1999 (19990310/ED)

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L3

STR

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

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    ANSWER 1 OF 85 HCAPLUS COPYRIGHT 1999 ACS
L13
ΑN
     1999:113712 HCAPLUS
     Preparation of N-sulfonylproline dipeptide derivatives and analogs as
ΤI
     inhibitors of leukocyte adhesion mediated by VLA-4
ΙN
     Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Kreft,
     Anthony; Konradi, Andrei W.; Grant, Francine S.; Baudy, Reinhardt
     Bernhard; Sarantakis, Dimitrios
PA
     Athena Neurosciences, Inc., USA; American Home Products Corporation
SO
     PCT Int. Appl., 294 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
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                                                             DATE
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                            19990211
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             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 97-904423
                      19970731
     Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted
     alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted
     heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted
     heterocyclic ring; R3 = H, any group R1; R2R3 may form (un)substituted
     heterocyclic ring; R5 = CH2X1; X1 = H, OH, acylamino, (un)substituted
     alkyl, alkoxy, aryloxy, aryl, aryloxyaryl, CO2H, carboxyalkyl,
     carboxyaryl, carboxyheteroaryl, (un)substituted cycloalkyl,
     (un) substituted heterocyclyl; Q = C(X)NR7; R7 = H, alkyl; X = O, S; R6 = C(X)NR7
     NH2, (un) substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy,
     adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y,
    OCH2NR9R10; Y = H, (un) substituted alkyl, (un) substituted aryl; p = 1-8;
     R9 = (un) \text{ substituted CO-aryl}; R10 = H, CH2CO2R11, NHSO2Z'; R11 = alkyl; Z'
     = (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted aryl,
     (un) substituted heteroaryl, (un) substituted heterocyclyl; and
    pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4
     (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of
     these compds. also inhibit leukocyte adhesion and, in particular,
     leukocyte adhesion mediated by VLA-4. Such compds. are useful in the
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treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of Ts-Pro-OH (Ts = tosyl) with H-Tyr-OMe gave 75% of the corresponding ester, which underwent sapon. in quant. yield to give desired dipeptide Ts-Pro-Tyr-OH. All prepd. compds. have IC50 .ltoreq. 15 .mu.M in a VLA-4 binding assay. INDEXING IN PROGRESS 220149-83-7P RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-sulfonylproline dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220149-81-5 RL: RCT (Reactant) (prepn. of N-sulfonylproline dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220176-17-0P 220176-20-5P 220176-95-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of N-sulfonylproline dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) ANSWER 2 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13 1999:113711 HCAPLUS Preparation of N-sulfonylprolylphenylalanine derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4 Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Lombardo, Louis John; Konradi, Andrei W.; Grant, Francine S.; Dressen, Darren B.; Dappen, Michael S. Athena Neurosciences, Inc., USA; American Home Products Corporation PCT Int. Appl., 172 pp. CODEN: PIXXD2 Patent English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ______ WO 9906436 Al 19990211 9906436

Al 19990211

WO 98-US15327

19980731

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG WO 98-US15327 19980731 PRAI US 97-903585 19970731 Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un) substituted alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted heterocyclyl; R2NCHR3 form satd. heterocyclic group with the proviso that when monosubstituted, the substituent on the satd. heterocyclic group is not CO2H; R5 = (CH2)n-aryl, (CH2)n-heteroaryl; n = 1-4; Q = C(X)NR7; R7 = H, alkyl; X = 0, S; R6 = NH2, (un)substituted alkoxy, (un)substituted cycloalkoxy, succinimidyloxy, adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un)substituted alkyl, (un) substituted aryl; p = 1-8; R9 = (un) substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = (un) substituted alkyl, (un) substituted

cycloalkyl, (un) substituted aryl, (un) substituted heteroaryl,

(un) substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with the proviso that when R1 = 2,4,6-Me3C6H2, R2NCHR3 =

pyrrolidinyl ring and Q = C(O)NH, then R5 .noteq. benzyl; with the further proviso that when R1 = 4-MeC6H4, R2NCHR3 = pyrrolidinyl derived from

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D-proline, and Q = C(O)NH, then R5 .noteq. benzyl derived from D-phenylalanine] which bind VLA-4 (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated coupling of Boc-L-Pro-OH with L-phenylalanine benzyl ester hydrochloride in the presence of N-methylmorpholine, followed by acidic deprotection, sulfonylation with MeSO2Cl, and catalytic deprotection to give desired dipeptide MeSO2-L-Pro-L-Phe-OH. 220187-04-2P 220187-13-3P 220187-27-9P 220187-37-1P 220187-39-3P 220187-43-9P 220187-45-1P 220187-47-3P 220187-48-4P 220187-66-6P RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-sulfonylprolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 217450-71-0P 220186-85-6P 220186-87-8P 220186-88-9P 220186-91-4P 220186-95-8P 220186-96-9P 220186-97-0P 220186-98-1P 220186-99-2P 220187-00-8P 220187-05-3P 220187-06-4P 220187-07-5P 220187-08-6P 220187-10-0P 220187-11-1P 220187-12-2P 220187-14-4P 220187-15-5P 220187-16-6P 220187-17-7P 220187-18-8P 220187-19-9P 220187-22-4P 220187-25-7P 220187-26-8P 220187-28-0P 220187-29-1P 220187-30-4P 220187-31-5P 220187-35-9P 220187-38-2P 220187-40-6P 220187-41-7P 220187-42-8P 220187-44-0P 220187-46-2P 220187-49-5P 220187-50-8P 220187-51-9P 220187-57-5P 220187-58-6P 220187-59-7P 220187-60-0P 220187-61-1P 220187-64-4P 220187-65-5P 220187-67-7P 220187-69-9P 220187-72-4P 220187-74-6P 220187-77-9P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-sulfonylprolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220149-81-5 RL: RCT (Reactant) (prepn. of N-sulfonylprolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220187-79-1P 220187-83-7P 220187-84-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of N-sulfonylprolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

- L13 ANSWER 3 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- ΑN 1999:113710 HCAPLUS

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- Preparation of N-sulfonyl dipeptide derivatives and analogs as inhibitors ΤI of leukocyte adhesion mediated by VLA-4 IN
- Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Konradi, Andrei W.; Grant, Francine S.; Dressen, Darren B.; Baudy, Reinhardt
- Athena Neurosciences, Inc., USA; American Home Products Corporation PΑ SO
- PCT Int. Appl., 151 pp. CODEN: PIXXD2

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           PATENT NO.
                                     KIND DATE
                                                                APPLICATION NO. DATE
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                                        A1 19990211 WO 98-US15314 19980730
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   PRAI US 97-904415
                                       19970731
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           alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted
          heterocyclyl; R2 = H, any group R1, (un) substituted cycloalkenyl; R1R2 may
           form heterocyclic ring; R3 = any group R1; R2R3 may form heterocyclic
          ring; R4 = any group R1; R3R4 may form cycloalkyl, (un)substituted
          heterocyclic ring; R5 = CHMe2, CH2X, :CHX1; X1 = H, OH, acylamino,
          optionally substituted alkyl, alkoxy, aryloxy, aryl, aryloxyaryl, carboxy,
          carboxyalkyl, etc.; Q = C(X)NR7, X = 0, S, R7 = H, alkyl; X = 0, S; R6 = 0
          NH2, (un) substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy,
          adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y,
          OCH2NR9R10; Y = H, (un) substituted alkyl, (un) substituted aryl; p = 1-8;
          R9 = (un)substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = CH2CO2R11, NHSO2Z; R11 = alkyl; R11 = al
          (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted aryl,
          (un) substituted heteroaryl, (un) substituted heterocyclyl; and
          pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4
          (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of
          these compds. also inhibit leukocyte adhesion and, in particular,
          leukocyte adhesion mediated by VLA-4. Such compds. are useful in the
          treatment of inflammatory diseases in a mammalian patient, e.g., human,
         wherein the disease may be, for example, asthma, Alzheimer's disease,
         atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease,
         rheumatoid arthritis, tissue transplantation, tumor metastasis and
         myocardial ischemia. The compds. can also be administered for the
         treatment of inflammatory brain diseases such as multiple sclerosis.
         Thus, sulfonylation of cycloleucine (1-aminocyclopentanecarboxylic acid)
         with tosyl chloride, followed by peptide coupling with L-phenylalanine Me
         ester and sapon. gave desired title compd. 4-MeC6H4SO2-cycloleucyl-L-
         phenylalanine.
         220149-81-5
         RL: RCT (Reactant)
              (prepn. of N-sulfonyl dipeptide derivs. and analogs as inhibitors of
              leukocyte adhesion mediated by VLA-4)
L13
        ANSWER 4 OF 85 HCAPLUS COPYRIGHT 1999 ACS
ΑN
        1999:113709 HCAPLUS
        Preparation of N-sulfonylated aminophenylalanine dipeptide derivatives and
ΤI
        analogs as inhibitors of leukocyte adhesion mediated by VLA-4
        Ashwell, Susan; Grant, Francine S.; Konradi, Andrei W.; Kreft, Anthony;
ΙN
        Lombardo, Louis John; Pleiss, Michael A.; Sarantakis, Dimitrios; Semko,
        Christopher M.; Thorsett, Eugene D.
        Athena Neurosciences, Inc., USA; American Home Products Corporation
PA
SO
        PCT Int. Appl., 164 pp.
        CODEN: PIXXD2
DΤ
        Patent
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        English
FAN.CNT 1
        PATENT NO.
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PRAI US 97-920353 19970731
GI
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AΒ Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un)substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = NR12C(Z)NR8R8', NR12C(Z)R13; R12 = H, alkyl, aryl; R8, R8' = independently H, any group R1; R8R8' may form heterocyclic ring; R13 = satd. heterocycle; Z = 0, S, NR13; x = 1-4; (CH2)n-heteroaryl; n = 1-4; Q = C(X)NR7; R7 = H, alkyl; X = O, S; R6 = C(X)NR7; R7 = H, NH2, (un) substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy, adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un)substituted alkyl, (un)substituted aryl; p = 1-8; R9 = (un) substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = = Alkyl(un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted aryl, (un) substituted heteroaryl, (un) substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, condensation of N-tosyl-L-prolyl-4-amino-L-phenylalanine Me ester with 3-phenylpropyl isothiocyanate gave the corresponding urea I. IT 220148-91-4P 220148-95-8P 220148-98-1P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-sulfonylated aminophenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

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        (Preparation); USES (Uses)
           (prepn. of N-sulfonylated aminophenylalanine dipeptide derivs. and
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       RL: RCT (Reactant)
           (prepn. of N-sulfonylated aminophenylalanine dipeptide derivs. and
          analogs as inhibitors of leukocyte adhesion mediated by VLA-4)
       ANSWER 5 OF 85 HCAPLUS COPYRIGHT 1999 ACS
 L13
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       1999:113708 HCAPLUS
       Preparation of N-sulfonyl phenylalanine dipeptide derivatives and analogs
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       as inhibitors of leukocyte adhesion mediated by VLA-4
       Dappen, Michael S.; Dressen, Darren B.; Grant, Francine S.; Pleiss,
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      Michael A.; Robinson, Cynthia Y.; Sarantakis, Dimitrios; Thorsett, Eugene
 PA
      Athena Neurosciences, Inc., USA; American Home Products Corporation
 SO
      PCT Int. Appl., 190 pp.
      CODEN: PIXXD2
      Patent
      English
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      PATENT NO.
                        KIND DATE
                                               APPLICATION NO. DATE
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                                               WO 98-US15952 19980731
          W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
          M: AL, AM, AI, AU, AZ, BA, BB, BG, BK, BI, CA, CH, CN, CU, CZ, DE, CK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FT, FR, GR, GR, TF, TT, LH, MC, NIL, PT, SE, RF, RJ, CF, CG, CL
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 97-904416
                        19970731
     Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted
     alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted
     heterocyclyl; R2 = H, any group R1; R1R2 may form (un) substituted
     heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted
     unsatd. heterocyclic ring; R5 = CH2X1; X1 = H, OH, optionally substituted
     acylamino, alkyl, aryloxy, aryl, aryloxyaryl, CO2H, carboxyalkyl,
    carboxyheteroaryl, etc.; Q = C(X)NR7; R7 = H, alkyl; X = O, S; R6 = NH2,
     (un) substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy,
    adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y,
    OCH2NR9R10; Y = H, (un)substituted alkyl, (un)substituted aryl; p = 1-8;
    R9 = (un)substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z =
    (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted aryl,
    (un) substituted heteroaryl, (un) substituted heterocyclyl; and
    pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4
    (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of
```

DT

LA

PT

AΒ

these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, reaction of Ts-Gly-OH (Ts = tosyl) with oxalyl chloride in CH2Cl2, followed by peptide coupling with L-phenylalanine benzyl ester tosylate and catalytic hydrogenolysis, gave desired title compd. Ts-Gly-Phe-OH. All prepd. compds. have IC50 .ltoreq. 15 .mu.M in a VLA-4 binding assay. RL: RCT (Reactant)

IT

(prepn. of N-sulfonyl phenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

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ANSWER 6 OF 85 HCAPLUS COPYRIGHT 1999 ACS
1.13
ΑN
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1999:113707 HCAPLUS

ΤI Preparation of N-sulfonyl dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4 ΙN

Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Lombardo, Louis John; Grant, Francine S.; Dressen, Darren B.; Dappen, Michael S. PA

Athena Neurosciences, Inc., USA; American Home Products Corporation SO

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO DATE	
PI WO 9906432 A1 19990211 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CO, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TO, LG, GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, CO, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRAI US 97-904417 APPLICATION NO. DATE APPLICATION NO. DATE	KE, KG, MW, MX, IR, TT, IJ, TM

Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un) substituted alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted heterocyclic ring; R5 = Alk-X1, :CHY; Alk = alkyl chain of 1-10 carbon atoms; $\tilde{X}1$ = halo, CN, NO2, optionally substituted sulfonyl, sulfonyloxy, amino, alkyl, aryloxy, aryl, aryloxyaryl, carboxyalkyl, carboxyheteroaryl, etc.; Q = C(X)NR7; R7 = H, alkyl; X = 0, S; R6 = NH2, (un)substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy, adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un) substituted alkyl, (un) substituted aryl; p = 1-8; R9 = (un) substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted aryl, (un) substituted heteroaryl, (un) substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of Ts-Pro-OH (Ts = tosyl) with H-Asp(0CMe3)-OMe.HCl, followed by

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.alpha.-ester sapon., gave gave desired title compd. Ts-Pro-Asp(OCMe3)-OH.
        All prepd. compds. have IC50 .ltoreq. 15 .mu.M in a VLA-4 binding assay.
        220176-17-0P 220176-18-1P 220176-19-2P
   ΙT
        220176-20-5P 220176-21-6P 220176-22-7P
        220176-23-8P 220176-24-9P 220176-28-3P
        220176-33-0P 220176-34-1P 220176-38-5P
        220176-40-9P 220176-41-0P 220176-42-1P
        220176-43-2P 220176-44-3P 220176-45-4P
        220176-46-5P 220176-47-6P 220176-48-7P
        220176-49-8P 220176-50-1P 220176-51-2P
        220176-52-3P 220176-72-7P 220176-73-8P
        220176-74-9P 220176-75-0P 220176-76-1P
        220176-77-2P 220176-78-3P 220176-79-4P
       220176-80-7P 220176-81-8P 220176-82-9P
       220176-83-0P 220176-84-1P 220176-85-2P
       220176-86-3P 220176-87-4P 220176-88-5P
       220176-89-6P 220176-90-9P 220176-91-0P
       220176-92-1P 220176-94-3P 220176-95-4P
       220176-96-5P
       RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
       preparation); THU (Therapeutic use); BIOL (Biological study); PREP
          (prepn. of N-sulfonyl dipeptide derivs. and analogs as inhibitors of
          leukocyte adhesion mediated by VLA-4)
  TΤ
       220176-98-7
       RL: RCT (Reactant)
          (prepn. of N-sulfonyl dipeptide derivs. and analogs as inhibitors of
          leukocyte adhesion mediated by VLA-4)
  ΙT
       220177-04-8P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
          (prepn. of N-sulfonyl dipeptide derivs. and analogs as inhibitors of
         leukocyte adhesion mediated by VLA-4)
      ANSWER 7 OF 85 HCAPLUS COPYRIGHT 1999 ACS
 ΑN
      1999:12304 HCAPLUS
 DN
      130:66800
      Preparation of D-amino acid derivatives as cysteine and serine protease
 ΤI
 ΙN
      Chatterjee, Sankar
 PΑ
      Cephalon, Inc., USA
      U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 755,839, abandoned.
 DT
      Patent
LA
      English
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
                      ----
                                            _____
PΤ
     US 5852007
                       A 19981222
                                            US 97-795546
PRAI US 96-755839
                                                             19970206
                       19961126
0s
     MARPAT 130:66800
     The compds. QC*(NR2R3)(R4)CONHC(R1)(R5)C(W1)(W2)Y [C* = carbon atom having
AB
     a D-configuration; Q = GB(CHR20)q; R20 = H, alkyl; q = 0 -2; B = CO, etc.;
     G = aryl, etc.; R1 = H, alkyl, etc.; R2 = COR6, etc.; R6 = aryl, etc.; R3
     = H, alkyl, etc.; further details on R2, R3, Q are given; R4, R5 = H,
     alkyl; \overline{\text{W1}} and \overline{\text{W2}} are selected such that \overline{\text{W1}} is \overline{\text{H}} and \overline{\text{W2}} is O(CO)\,NHR26 where
     R26 is alkyl, or W1 and W2 are both alkoxy, or W1 is OH and W2 is selected
     from aralkyl, aralkyloxy, etc.; further details on W1 and W2 are given; Y
     = H, CH:N2, etc.; further details on Y and R1 are given] are prepd.
    Compds. of this invention in vitro showed IC50 values of 3 - 1000 \text{ nM}
    192722-72-8P 192722-73-9P 192722-74-0P
ΙT
    192722-90-0P
    RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
    (Preparation); USES (Uses)
       (prepn. of D-amino acid derivs. as cysteine and serine protease
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inhibitors)

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L13 ANSWER 8 OF 85 HCAPLUS COPYRIGHT 1999 ACS
 ΑN
      1998:799995 HCAPLUS
 DN
      130:52736
      Preparation of biarylalkanoic acids as cell adhesion inhibitors
 TΙ
      Durette, Philippe L.; Hagmann, William K.; Maccoss, Malcolm; Mills, Sander
 ΤN
      G.; Mumford, Richard A.
 PA
      Merck & Co., Inc., USA
 SO
      PCT Int. Appl., 96 pp.
      CODEN: PIXXD2
 DT
      Patent
 LA
      English
 FAN.CNT 1
      PATENT NO.
                      KIND DATE
                                         APPLICATION NO. DATE
      -----
 PΙ
                       Al 19981203 WO 98-US10951 19980529
      WO 9853817
          W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW,
              HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK,
              MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
          US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
PRAI US 97-47856
                       19970529
      GB 97-14316
                       19970707
     US 97-66831
                       19971125
     GB 98-680
                       19980114
OS
     MARPAT 130:52736
     Compds. R1YNR2CR3R4CONR5CR6R7X [R1 = (un)substituted alkyl, alkenyl,
AB
     alkynyl, a cyclic group Cy, Cy-alkyl, Cy-alkenyl, Cy-alkynyl; R2, R3
     independently are H or R1; or R2 and R3 together form a ring; R4, R7
     independently are H, (un) substituted alkyl, alkenyl, alkynyl, aryl,
     arylalkyl, heteroaryl, or heteroarylalkyl; or R3 and R4 together form a
     ring; R\bar{5} = H or (un) substituted alkyl or Cy; R\bar{6} = diarylalkyl, -alkenyl,
     or -alkynyl; X = CO2H, PO3H2, PH(O)OH, SO2H, SO3H or ester derivs.,
     carbamoyl group, or 5-tetrazolyl; Y = CO, OCO, NHCO or iminocarbonyl
     group, SO2, P(O)(ORi) (Ri =alkyl, alkenyl, alkynyl, aryl), COCO] were
     prepd. as cell adhesion inhibitors. Pharmaceutical compns. are described.
     Thus, N-(3,5-dichlorobenzenesulfonyl)-L-prolyl-L-4-(4-
     fluorophenyl)phenylalanine was prepd. by coupling of N-(3,5-
     dichlorobenzenesulfonyl)-L-proline with 4-iodo-L-phenylalanine and
     reaction with 4-fluorobenzeneboronic acid.
ΙΤ
     217326-87-9
     RL: RCT (Reactant)
        (prepn. of peptidyl biarylalkanoic acids as cell adhesion inhibitors)
ΙT
     217326-49-3P 217326-50-6P 217326-58-4P
     217326-60-8P 217326-62-0P 217326-73-3P
     217326-74-4P 217326-75-5P 217326-76-6P
     217326-77-7P 217326-78-8P 217326-83-5P
     217326-86-8P 217326-88-0P 217326-95-9P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of peptidyl biarylalkanoic acids as cell adhesion inhibitors)
ΙT
     217325-08-1P 217325-09-2P 217325-10-5P
     217325-11-6P 217325-12-7P 217325-13-8P
     217325-14-9P 217325-15-0P 217325-16-1P
     217325-17-2P 217325-18-3P 217325-19-4P
     217325-20-7P 217325-21-8P 217325-22-9P
    217325-23-0P 217325-24-1P 217325-25-2P
    217325-26-3P 217325-27-4P 217325-29-6P
     217325-31-0P 217325-54-7P 217325-55-8P
    217325-56-9P 217325-58-1P 217325-59-2P
    217325-60-5P 217325-61-6P 217325-62-7P
    217325-63-8P 217325-64-9P 217325-65-0P
    217325-66-1P 217325-67-2P 217325-68-3P
    217325-69-4P 217325-94-5P 217325-95-6P
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217325-96-7P 217325-97-8P 217325-98-9P
      217326-03-9P 217326-04-0P 217326-05-1P
      217326-06-2P 217326-08-4P 217326-09-5P
      217326-12-0P 217326-13-1P 217326-14-2P
      217326-15-3P 217326-16-4P 217326-17-5P
     217326-29-9P 217326-36-8P 217326-38-0P
     217326-42-6P 217326-43-7P 217326-44-8P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of peptidyl biarylalkanoic acids as cell adhesion inhibitors)
     ANSWER 9 OF 85 HCAPLUS COPYRIGHT 1999 ACS
L13
     1998:799992 HCAPLUS
DN
     130:52724
     Preparation of heterocyclic dipeptide derivatives as cell adhesion
ΤI
     inhibitors
     Durette, Philippe L.; Hagmann, William K.; Maccoss, Malcolm; Mills, Sander
ΤN
     G.; Mumford, Richard A.; Van Riper, Gail M.; Schmidt, Jack A.; Kevin,
     Nancy J.
PΑ
     Merck & Co., Inc., USA
     PCT Int. Appl., 129 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                           -----
                                          -----
PI
    WO 9853814
                    Al 19981203
                                         WO 98-US10940 19980529
        W: CA, JP, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
PRAI US 97-48017
                     19970529
    GB 97-14314
                     19970707
    US 97-66525
                     19971125
    GB 98-686
                     19980114
    MARPAT 130:52724
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OS GI

Title compds. I [R1 = (un)substituted C1-10 alkyl, C2-10 alkenyl, C2-10]AB alkynyl, Cy, Cy-C1-10 alkyl, Cy-C2-10 alkenyl, Cy-C2-10 alkynyl; R2, R5 = independently (un) substituted H, C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, aryl, aryl-C1-10 alkyl, heteroaryl, heteroaryl-C1-10 alkyl; R3 = H, (un) substituted C1-10 alkyl, Cy, Cy-C1-10 alkyl; R4 = H, any group R1; R3R4 form mono- or bicyclic ring contg. 0-2 heteroatoms N, O, S; R4R5 form 3-7 membered mono- or bicyclic ring contg. 0-2 heteroatoms N, O, S; R10, R11 = independently = any group R3, (un) substituted C2-10 alkenyl, C2-10 alkynyl; R10R11 may form 5-7 membered heterocyclic ring contg. 0-2 addnl. heteroatoms N, O, S; R6-R8 = independently any group R10, OR10, NO2, halo, S(O)mR10, SR10, SO3R10, NR10R11, COR10, CO2R10, O2R10, CN, CONR10R11, CF3, oxo, NR10S(O)mR11, etc.; two of R6-R8 may form 5-7 membered (un)satd. monocyclic ring contg. 0-3 heteroatoms N, 0, S; Cy = cycloalkyl, heterocyclyl, aryl, heteroaryl; A, Z = independently C, C-C; B = bond, C, C-C, N, O, S, S(\overline{O})m; X = CO2R10, P(O) (OR10) (OR11), P(O) (R10) (OR11),

S(O) mOR10, CONR10R11, 5-tetrazolyl; Y = CO, O2C, NR11CO, SO2, P(O) (OR4),

Τጥ

ΙT

IT

COCO; m = 1-2] = are antagonists of VLA-4 and/or .alpha.4.beta.7, and are useful for inhibition or prevention of cell adhesion and cell adhesion mediated pathologies. These compds. may be formulated into pharmaceutical compns. and are suitable for use in the treatment of asthma, allergies, inflammation, multiple sclerosis, and other inflammatory and autoimmune disorders. Thus, coupling of L-2-naphthylalanine tert-Bu ester (H-Nal-OtBu) (prepn. given) with Cbz-Pro-OH (Cbz = PhCH2O2C), followed by catalytic deprotection, sulfonylation with 3,5-Cl2C6H3SO2Cl, and acidic deesterification gave desired N-sulfonyldipeptide C12C6H3SO2-Nal-Pro-OH. Procedures for inhibition of VLA-4 dependent adhesion to a CS-1 conjugate and VCAM-IG fusion protein are given. 217450-69-6P 217450-70-9P 217450-71-0P 217450-72-1P 217450-73-2P 217450-75-4P 217450-76-5P 217450-77-6P 217450-78-7P 217450-79-8P 217450-80-1P 217450-81-2P 217450-83-4P 217450-85-6P 217450-87-8P 217450-88-9P 217450-90-3P 217450-91-4P 217450-92-5P 217450-93-6P 217450-94-7P 217450-95-8P 217450-96-9P 217450-98-1P 217451-12-2P 217451-13-3P 217451-16-6P 217451-18-8P 217451-19-9P 217451-20-2P 217451-22-4P 217451-23-5P 217451-31-5P 217451-50-8P 217451-51-9P 217451-52-0P 217451-54-2P 217451-63-3P 217451-67-7P 217451-68-8P 217451-70-2P 217451-72-4P 217451-73-5P 217451-74-6P 217451-76-8P 217451-77-9P 217451-78-0P 217451-84-8P 217451-85-9P 217451-86-0P 217451-87-1P 217451-88-2P 217451-89-3P 217451-90-6P 217451-91-7P 217451-93-9P 217451-94-0P 217451-95-1P 217451-96-2P 217451-97-3P 217451-98-4P 217451-99-5P 217452-00-1P 217452-01-2P 217452-02-3P 217452-03-4P 217452-04-5P 217452-06-7P 217452-08-9P 217452-09-0P 217452-10-3P 217452-11-4P 217452-13-6P 217452-14-7P 217452-17-0P 217452-18-1P 217452-22-7P 217452-23-8P 217452-24-9P 217452-27-2P 217452-28-3P 217452-32-9P 217452-33-0P 217452-34-1P 217452-35-2P 217452-36-3P 217452-37-4P 217452-41-0P 217452-42-1P 217452-44-3P 217452-46-5P 217452-47-6P 217452-48-7P 217452-49-8P 217452-50-1P 217452-51-2P 217452-52-3P 217452-53-4P 217452-55-6P 217452-56-7P 217452-61-4P 217452-62-5P 217452-64-7P 217452-65-8P 217452-66-9P 217452-71-6P 217452-96-5P 217452-97-6P 217452-99-8P 217453-00-4P 217453-01-5P 217453-02-6P 217453-04-8P 217453-05-9P 217453-06-0P 217453-10-6P 217453-11-7P 217453-12-8P 217453-13-9P 217453-14-0P 217453-15-1P 217453-16-2P 217453-17-3P 217453-18-4P 217453-19-5P 217453-20-8P 217453-21-9P 217453-22-0P 217453-23-1P 217453-27-5P 217453-28-6P 217453-32-2P 217453-37-7P 217453-38-8P 217453-39-9P 217453-41-3P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of heterocyclic dipeptide derivs. as cell adhesion inhibitors) 217326-62-0 RL: RCT (Reactant) (prepn. of heterocyclic dipeptide derivs. as cell adhesion inhibitors) 217326-49-3P 217326-58-4P 217453-50-4P

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217453-54-8P 217453-55-9P 217453-57-1P
        217453-58-2P 217453-59-3P 217453-65-1P
        217453-66-2P 217453-67-3P 217453-68-4P
        217453-69-5P 217453-70-8P 217453-75-3P
        RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
            (prepn. of heterocyclic dipeptide derivs. as cell adhesion inhibitors)
       ANSWER 10 OF 85 HCAPLUS COPYRIGHT 1999 ACS
 L13
 ΑN
        1998:795039 HCAPLUS
 DN
        130:52733
        Preparation of tyrosine derivatives as antiinflammatory agents
 TI
       Head, John Clifford; Archibald, Sarah Catherine; Warrellow, Graham John
 ΙN
 PA
       Celltech Therapeutics Limited, UK
       PCT Int. Appl., 55 pp.
 SO
       CODEN: PIXXD2
 DT
       Patent
 LA
       English
 FAN.CNT 1
       PATENT NO.
                              KIND
                                      DATE
                                                          APPLICATION NO.
                              ____
PΙ
       WO 9854207
                               Α1
                                      19981203
                                                          WO 98-GB1580
            W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
                                                                                 19980529
                 DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            RE, RK, RZ, LC, LR, LR, LS, LI, LO, LV, EID, EIG, EIK, EIW, EIW, EIW, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
PRAI GB 97-11143
                             19970530
      GB 97-22674
                             19971027
OS
      MARPAT 130:52733
GT
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R3
RO
(Alk)
$$_{\text{m}}$$
CR4 $_{\text{R}}$ 5NR6CO

Y

I

HO2C
N
HO2C
N
H
S
II

AB Tyrosine derivs. I [R = RlX1, (Hall)3CSO2; Rl = optionally substituted alkyl or arom. group; R2, R3 = independently H, halo, alkyl, alkoxy, OH, NO2; R4 = H, Me; R5 = (CH2)pCO2R8; R6= H, alkyl; R7 = optionally substituted alkyl group, aryl, aralkyl; R8 = H, alkyl; Alk = alkylene chain; Hall = F, Cl; X1 = bond, (CH2)n, CO, CH2CO, NHCO, CH2NHCO, SO2; X2 = CO, CO2, CONH, SO2; Y = S, S(O)q; m = 0, 1; n = 1, 2; p = 0, 1; q = 1, compds. are able to inhibit the binding of .alpha.4 integrins to their ligands and are of use in the prophylaxis and treatment of immune or inflammatory disorders. Thus, coupling of N-acetyl-D-thioproline with

L-tyrosine tert-Bu ester, followed by O-acylation with 2,6-dichlorobenzoyl chloride and acidic deesterification, gave desired tyrosine deriv. II. and related thioprolyltyrosine derivs. were tested for inhibition of .alpha.4 integrin-dependent cell adhesion, and generally have IC50 values of .ltoreq.1 .mu.M in .alpha.4.beta.1 and .alpha.4.beta.7 assays, and IC50 values of .gtoreq. 50 .mu.M in assays of other integrins.

ΙT RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (prepn. of tyrosine derivs. as antiinflammatory agents)

ANSWER 11 OF 85 HCAPLUS COPYRIGHT 1999 ACS

ΑN DN

130:81806

TI P2-proline-derived inhibitors of calpain I ΑU

Tripathy, Rabindranath; Gu, Zi-Qiang; Dunn, Derek; Senadhi, Shobha E.; Ato, Mark A.; Chatterjee, Sankar

CS

Department of Chemistry, Cephalon, Inc., West Chester, PA, 19380-4245, USA Bioorg. Med. Chem. Lett. (1998), 8(19), 2647-2652 SO CODEN: BMCLE8; ISSN: 0960-894X Elsevier Science Ltd. PΒ

DT Journal

LA English

The syntheses and biol. activities of a series of calpain I inhibitors, AΒ 192722-72-8 192722-90-0 218602-51-8 ŢΤ

RL: BAC (Biological activity or effector, except adverse); BIOL

(synthesis and biol. activity of proline-derived inhibitors of calpain

ANSWER 12 OF 85 HCAPLUS COPYRIGHT 1999 ACS

1998:568589 HCAPLUS DN

129:175653

Preparation of benzenesulfonamides as elastase inhibitors TI

Nakae, Takahiko; Kato, Masashi; Fujita, Takehito; Kawabata, Kazuhito; ΙN PΑ Ono Pharmaceutical Co., Ltd., Japan SO

U.S., 150 pp. CODEN: USXXAM

DT Patent LA

English FAN. CNT

FAN	.CNT 2				
	PATENT NO. US 5795890 JP 10251218 JP 95-272568 JP 96-45663 JP 95-272058 JP 96-271341 MARPAT 129:17565	A2 1998 19950927 19960208 19950927	0818 U	S 96-718722 P 98-111630	DATE 19960924 19960924

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1 = C1-8 alkyl, C1-8 alkoxy, OH, etc.; n = 0-5; D = 0.00AΒ carbocyclic ring; R2, R3 = H, C1-4 alkyl, C1-4 alkoxy, etc.; R2R3 = C1-4 alkylidene; CR2R3 = C3-7 cycloalkyl; R4 = C1-4 alkyl, C1-4 alkoxy; two of R4, attached to the benzene nucleus at ortho positions relative to each other, represent C3-5 alkylene; m = 0-4; R5, R6 = H, OH, C1-8 alkyl, etc.;

NR5R6 = heterocyclyl] and their salts, which have an inhibitory effect on elastase and therefore are useful in the prevention and/or the treatment of emphysema, rheumatoid arthritis, atherosclerosis, adult respiratory distress syndrome (ARDS), glomerular nephritis, myocardial infarction, idiopathic ulcerative colitis, and gingivitis, were prepd. and formulated. Thus, treatment of the ester II (prepn. described) with CF3CO2H in ${
m CH2Cl2/MeOPh}$ afforded the title compd. III.HCl which showed IC50 of 0.055 .mu.M against human polymorphonuclear elastase.

IT 190252-08-5P

> RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzenesulfonamides as elastase inhibitors)

- ANSWER 13 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13
- ΑN 1998:237219 HCAPLUS
- DN 129:24858
- Gp180, a protein that binds duck hepatitis B virus particles, has TΙ metallocarboxypeptidase D-like enzymic activity
- Eng, Francis J.; Novikova, Elena G.; Kuroki, Kazuyuki; Ganem, Don; ΑU Fricker, Lloyd D.
- CS Department Molecular Pharmacology, Albert Einstein College Medicine, Bronx, NY, 10461, USA
- SO J. Biol. Chem. (1998), 273(14), 8382-8388 CODEN: JBCHA3; ISSN: 0021-9258
- American Society for Biochemistry and Molecular Biology PB
- DT Journal
- LAEnglish
- AB Duck gp180 was previously identified by its ability to bind to the preS envelope protein of duck hepatitis B virus particles. Cloning and sequencing of gp180 cDNA revealed that it is a polyprotein with three carboxypeptidase-like domains. To evaluate enzymic properties of this protein, a sol. 170-kDa form of the protein (gp170) lacking the C-terminal transmembrane domain and cytoplasmic tail was expressed in a baculovirus system. The purified 170-kDa protein cleaved 5-dimethylaminonaphthalene-1sulfonyl (dansyl)-Phe-Ala-Arg with a pH optimum of 5.5-6.5. With this substrate at pH 5.5, the 170-kDa protein displayed a Km of 12 .mu.M and a Kcat of 57 s-1. Dansyl-Pro-Ala-Arg and dansyl-Phe-Phe-Arg were cleaved with Km values of 17 and 21 .mu.M, and Kcat values of 57 and 17 s-1, resp. Constructs contg. only the first or second carboxypeptidase domains also showed enzymic activity. The effects of inhibitors and ions on enzyme activity of gp170 were generally similar to the effects of these compds. on purified bovine carboxypeptidase D. To evaluate the regions within gp180 necessary for binding preS, a series of deletion mutants were expressed in the 293T human kidney cell line. Deletions of the first and second domains, leaving the third domain intact, eliminated carboxypeptidase activity but retained preS binding. Deletion of the third domain eliminated preS binding but not carboxypeptidase activity. These results indicate that the third domain is responsible for preS binding, and this binding does not require carboxypeptidase activity.

IT 87687-43-2

- RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (substrate; gp180, a protein that binds duck hepatitis B virus particles, has metallocarboxypeptidase D-like enzymic activity)
- L13 ANSWER 14 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- ΑN 1998:79057 HCAPLUS
- DN 128:241112
- ΤI Membrane type-1 matrix metalloprotease and stromelysin-3 cleave more efficiently synthetic substrates containing unusual amino acids in their P1' positions
- ΑU Mucha, Artur; Cuniasse, Philippe; Kannan, Rama; Beau, Fabrice; Yiotakis, Athanasios; Basset, Paul; Dive, Vincent
- CS CEA, Departement d'Ingenierie et d'Etudes des Proteines, CE-Saclay, Gif/Yvette, 91191, Fr.
- SO J. Biol. Chem. (1998), 273(5), 2763-2768

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CODEN: JBCHA3; ISSN: 0021-9258
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PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AΒ

The influence of the substrate P1' position on the specificity of two zinc matrix metalloproteases, membrane type-1 matrix metalloprotease (MT1-MMP) and stromelysin-3 (ST3), was evaluated by synthesizing a series of fluorogenic substrates of general formula dansyl-Pro-Leu-Ala-Xaa-Trp-Ala-Arg-NH2, where Xaa in the Pl' position represents unusual amino acids contg. either long arylalkyl or alkyl side chains. Our data demonstrate that both MT1-MMP and ST3 cleave substrates contg. in their Pl' position unusual amino acids with extremely long side chains more efficiently than the corresponding substrates with natural phenylalanine or leucine amino acids. In this series of substrates, the replacement of leucine by S-para-methoxybenzyl cysteine increased the kcat/Km ratio by a factor of 37 for MT1-MMP and 9 for ST3. The substrate with a S-para-methoxybenzyl cysteine residue in the P1' position displayed a kcat/Km value of $1.59\ 106$ M-1 S-1 and 1.67 104 M-1 S-1, when assayed with MT1-MMP and ST3, resp. This substrate is thus one of the most rapidly hydrolyzed substrates so far reported for matrixins, and is the first synthetic peptide efficiently cleaved by ST3. These unexpected results for these two matrixins suggest that extracellular proteins may be cleaved by matrixins at sites contq. amino acids with unusual long side chains, like those generated in vivo by some post-translational modifications.

IT 204981-55-5 204981-56-6 204981-57-7 204981-58-8 204981-59-9 204981-60-2 204981-61-3 204981-62-4 204981-63-5 204981-64-6 204981-65-7

RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)

(membrane type-1 matrix metalloprotease and stromelysin-3 cleave more efficiently synthetic substrates contg. unusual amino acids in P1' positions)

L13 ANSWER 15 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:65811 HCAPLUS

DN 128:136515

TI Bone resorption inhibitors

IN Aibe, Kazuhiko; Takebayashi, Yukihiro; Ishii, Yasutaka; Noshiro, Osamu; Noda, Ichio; Igarashi, Susumu

PA Yamanouchi Pharmaceutical Co., Ltd., Japan; Aibe, Kazuhiko; Takebayashi, Yukihiro; Ishii, Yasutaka; Noshiro, Osamu; Noda, Ichio; Igarashi, Susumu SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT	NO.		KI	ND	DATE			A	PPLI	CATI	ои и	Ο.	DATE			
PI	WO 980	1133		A	1	1998	0115		W	0 97	 -JP2	357		 1997	0708		
	W:	AL,	AM,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	GH,
		HU,	ΙL,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LV,	MD,	MG,
		MK,	MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,	SD,	SG,	SI,	SK,	ТJ,	TM,	TR,
		TT,	UA,	UG,	US,	UΖ,	VN,	YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW	GH,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,
						LU,			PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
						SN,											
	AU 973					1998	0202		Αl	J 97.	-335	96		1997	3708		
PRAI	JP 96-1																
	WO 97-	JP235	7	199	9707	80											
OS GI	MARPAT	128:	1365	15													

$$R^{1}-(G)_{n}-N$$
 $COXR^{3}$

Drugs, in particular, bone resorption inhibitors contg. as the active ingredient compds. having selective cathepsin K inhibitory effects, among all, proline derivs. represented by general formula (I) or pharmaceutically acceptable salts thereof, wherein each symbol has the meaning as specified below: X: a moiety (except for the C-terminal carbonyl group) of an amino acid residue with its side chain optionally protected; R1: an amino-protective group; G: a glycine residue; n: 0 or 1; R3: a group inhibiting the activity of the SH group of cysteine protease; and R4: hydrogen, hydroxy or Ph.

IT 202281-13-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bone resorption inhibitors)

Ι

IT 202282-11-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (bone resorption inhibitors)

L13 ANSWER 16 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:511712 HCAPLUS

DN 127:121991

TI Preparation of D-amino acid derivatives as cysteine and serine protease inhibitors

IN Chatterjee, Sankar

PA Cephalon, Inc., USA

SO PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 2

FAIV. CIVI 2																		
	PA'	rent	NO.		ΚI	ND	DATE			A	PPLI	CATI	ON N	Ο.	DATE			
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PΙ	WO	9721					1997											
		W:	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	KP.	KR.	KZ.	LC.
			LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW.	MX.	NO,	NZ.	PL.	PT.
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	TJ.	TM.	TR.	TT.	UA.	UG.	UZ.	VN.	AM.
							MD,				,			,	,	,	,	,
		RW:					SZ,				CH.	DE.	DK.	ES.	FT.	FR.	GB	GR
			IE,	IT,	LU,	MC.	NL,	PT.	SE.	BF.	BJ.	CF.	CG.	CT.	CM.	GA.	GN,	MI.
				NE,				,	,	,	_,	02,	00,	01,	011,	0117	0117	1111,
	CA	2238						1619		C	A 96.	-223	8175		1996	1127		
		9710					19970								1996			
PRAI		95-7				9511		3,05		23	5 51	102.))		1990.	112/		
		96-7																
		96-U																
os						2011	21											
	MMI	RPAT	12/:	1219	ЭT													
GI																		

The title compds. R3R2NC*(Q)R4CONHCR5R1CW1W2Y [I; C* = D-configuration C; Q = GB(CHR20)q; R20 = H, C1-4 alkyl; q = 0-2; B = CO, SO, SO2, S, CH2, NH, O, a bond; G = aryl, heteroaryl, aralkyl, etc.; R1 = H, alkyl, aralkyl, etc.; R2 = COR6, SO2R6, etc.; R6 = aryl, heteroaryl, aralkyl, etc.; R3 = H, lower alkyl, aralkyl, etc.; R4, R5 = H, lower alkyl; W1, W2 = H, alkyl, alkoxy, aralkyl, etc.; Y = H, CONR1OR11, CO2R10, etc.; R10, R11 = H, alkyl, aryl, etc.] are prepd. Methods for the use of I as protease inhibitors are also described. Thus, D-amino acid deriv. (II; X = CH2OH, Boc = Me3CO2C) (prepn. given) was oxidized by SO3-pyridine complex in the presence of Et3N to give the title compd. II (X = CHO) which showed IC50

II

of 24,000 nM against cathepsin L.
IT 192722-72-8P 192722-73-9P 192722-74-0P
192722-90-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of D-amino acid derivs. as cysteine and serine protease inhibitors)

L13 ANSWER 17 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:390578 HCAPLUS

DN 127:5005

TI Preparation of sulfamoylphenyl alkanoates as elastase inhibitors

IN Nakae, Takahiko; Kato, Masashi; Fujita, Takehito; Kawabata, Kazuhito; Ohno, Hiroyuki

PA Ono Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 270 pp.

CODEN: EPXXDW

DT Patent

LA English

GI

FAN.CNT 2												
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE								
				-								
ΡI	EP 769498	A1 19970423	EP 96-307048	19960927								
	R: AT, BE,	CH, DE, DK, ES, FI,	FR, GB, GR, IE, IT,	, LI, LU, NL, PT, SE								
	JP 09165365	A2 19970624	JP 95-272058	19950927								
	JP 09278742	A2 19971028	JP 96-271341	19960924								
	JP 10251218	A2 19980922	JP 98-111630	19960924								
	AU 9665837	A1 19970410	AU 96-65837	19960925								
	NO 9604045	A 19970401	NO 96-4045	19960926								
	CA 2186665	AA 19970328	CA 96-2186665	19960927								
PRAI	JP 95-272058	19950927										
	JP 96-45663	19960224										
	JP 96-271341	19960924										
os	MARPAT 127:5005											

- R1CR2R3CO2ZSO2NR5R6 [I; R1 = (un)substituted carbocyclic or heterocyclic AΒ ring; R2,R3 = H, halo, alkyl, Ph, etc.; R2R3 = alkylidene or atoms to complete a carbocyclic ring; R5, R6 = H, OH, alkyl, etc.; NR5R6 = heterocyclyl; Z = (un) substituted 1,4-phenylene] were prepd. Thus, (S)-4-(tert-butoxycarbonyl-1-pyrrolidinylsulfonyl)-2-methylphenol was esterified by 2-(4-pyrrolidinophenyl) butanoic acid (prepn. each given) to give title compd. II. Data for biol. activity of I were given.
- ΙT 190252-08-5P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of sulfamoylphenyl alkanoates as elastase inhibitors)
- L13 ANSWER 18 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN1997:239550 HCAPLUS
- DN 126:305778
- Peptides containing the sulfonamide junction: synthesis, structure, and TIconformation of Z-Tau-Pro-Phe-NHiPr
- ΑU Calcagni, A.; Rossi, D.; Paradisi, M. Paglialunga; Lucente, G.; Luisi, G.; Gavuzzo, E.; Mazza, F.; Pochetti, G.; Paci, M.
- CS Dip. Studi Farmaceutici, Univ. La Sapienza, Rome, 00185, Italy
- SO Biopolymers (1997), 41(5), 555-567 CODEN: BIPMAA; ISSN: 0006-3525
- PΒ Wiley
- DTJournal
- LA English
- The taurine (Tau) contg. tripeptide deriv. Z-Tau-Pro-Phe-NHiPr (I) has AΒ been synthesized as suitable sulfonamido-pseudopeptide model to investigate formation and conformational properties of folded secondary structures stabilized by intramol. H bonds directly involving the sulfonamide junction. In the crystal the pseudopeptide I adopts a type 1 .beta.-turn with the Pro and Phe residues located at the (i + 1) and (i + 1)2) corner positions, resp. The turn is stabilized by a 4 .fwdarw. 1 H bond engaging one of the SO2 oxygen atoms and the isopropylamide NH. CDC13 soln. the .beta.-turn folding is accompanied by a .gamma.-turn centered at the Pro and involving a 3 .fwdarw. $1\ \mathrm{H}$ bond between the SO2 and the Phe NH. A comparison of the structural and conformational properties found in I with those of the already known sulfonamidopseudopeptides, with particular ref. to the models contg. the Tau-Pro junction, is also reported.
- IT 189256-03-9P
 - RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn., conformation, and crystal structure of taurine-contg. tripeptide)
- ΙT 189256-04-0P 189256-05-1P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., conformation, and crystal structure of taurine-contg. tripeptide)
- L13 ANSWER 19 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- 1997:133869 HCAPLUS AN
- DN 126:234874
- Electrostatic as well as hydrophobic interactions are important for the TΙ

- association of Cpn60 (groEL) with peptides
- AU Hutchinson, Jonathan P.; Oldham, Timothy C.; El-Thaher, Talal S. H.; Miller, Andrew D.
- CS Dep. of Chemistry, Imperial College of Science, Technology and Medicine, South Kensington, SW7 2AY, UK
- SO J. Chem. Soc., Perkin Trans. 2 (1997), (2), 279-288 CODEN: JCPKBH; ISSN: 0300-9580
- PB Royal Society of Chemistry
- DT Journal
- LA English
- AΒ The interactions of groEL with five N-dansyl peptides were investigated by a fluorescence binding assay. The peptides studied (Bamph, Bhphil, Aamph, Ahphil, Namph) were designed and synthesized as systematic variants of each other in terms of their patterns of charge and hydrophobicity. Fluorescence data were analyzed using a fluorescence modified, y-reciprocal linearized form of the Benesi-Hildebrand equation which was derived from first principles and verified by theor. simulations. Under optimal conditions, apparent dissocn. consts., Kd, were obtained in the .mu.M range. At physiol. relevant ionic strengths, only two peptides (basic amphiphilic Bamph and neutral amphiphilic Namph) interacted with groEL while a third peptide (acidic amphiphilic Aamph) was able to interact but only at very high ionic strength (>1 molkg-1). Thermodn. (van't Hoff) anal. of the tightest binder, basic amphiphilic Bamph peptide, revealed endothermic binding and a large pos. entropy, .delta.SObind, consistent with a mixed binding mode involving both hydrophobic and electrostatic interactions. At physiol. relevant ionic strengths, pos. charged amino acid residues appear to augment hydrophobic binding interactions with groEL and a peptide or partially folded protein substrate is certainly hydrophobic, electrostatic effects can modulate or even overwhelm this interaction.
- IT 188446-53-9 188446-54-0 188446-55-1 188446-56-2 188446-57-3
 - RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (electrostatic as well as hydrophobic interactions are important for assocn. of Cpn60 (groEL chaperonin) with peptides)
- L13 ANSWER 20 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1997:7564 HCAPLUS
- DN 126:55103
- TI Biological activity of analogs of the peptide hormone luliberin in the regulation of immune response of T Lymphocytes
- AU Kazakova, T. B.; Burov, S. B.; Golovko, O. I.; Grishina, T. V.; Novikova, N. S.; Myul'berg, A. A.; Semko, T. V.; Korneva, E. A.
- CS Nauchno-Issled. Med., RAMN, Moscow, Russia
- SO Byull. Eksp. Biol. Med. (1996), 122(9), 334-337 CODEN: BEBMAE; ISSN: 0365-9615
- PB Meditsina
- DT Journal
- LA Russian
- AB The authors used the model system of frog occytes, injected with recombinant DNA MIL2C or 4xPu, contg. the marker CAT gene under the control of the 2.2 kb promoter for the murine interleukin-2 (IL-2) gene or the tetra copy of the purine-rich element (from -292 to -246 nucleotide pairs), resp. Promoter activity was preliminarily blocked by introduction into the oocyte of the nuclear protein fraction from resting mouse spleen T-lymphocytes. Derepression of the IL-2 gene promoter was exhibited on injection into the oocyte nucleus or cytoplasm of the truncated 7-amino acid LH-RH analog (L1). Addn. into the medium of peptide L1 or another analog of LH-RH (L2) induced the activation of murine spleen T-lymphocytes in vitro and stimulated, as shown by dot-blot and in situ hybridization, the synthesis of IL-2 mRNA 2-3-fold greater than by Con A + rIL-2. Cytol. anal. of the cell culture showed that the presence in the medium of peptides L1 or L2 potentiated the process of differentiation of murine spleen T-cells. Apparently, the antitumor effect shown by the peptides may be connected with the stimulation of IL-2 synthesis.
- IT 185321-83-9

- RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
 - (biol. activity of LH-RH analogs in regulation of immune response of T Lymphocytes)
- L13 ANSWER 21 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- ΑN 1996:206126 HCAPLUS
- DN 124:251755
- ΤI Subcutaneous injection of an analog of neuropeptide FF prevents naloxone-precipitated morphine abstinence syndrome
- Malin, D. H.; Lake, J. R.; Smith, D. A.; Jones, J. A.; Morel, J.; Claunch, A. E.; Stevens, P. A.; Payza, K.; Ho, K. K.; et al. University Houston, Houston, TX, 77058, USA Drug Alcohol Depend. (1995), 40(1), 37-42 ΑU
- CS
- SO CODEN: DADEDV; ISSN: 0376-8716
- DT Journal
- LA English
- AB There is evidence that neuropeptide FF (NPFF) has antiopiate activity and may play a role in opiate dependence and subsequent abstinence syndrome. A fragment of NPFF was modified at the C-terminal in an effort to convert it to an NPFF antagonist. It was also dansylated at the N-terminal in an effort to render it more lipophilic and increase its penetration of the blood-brain barrier. Third ventricle administration of the resulting compd., dansyl-PQRamide (0.75 .mu.g and 1 .mu.g), dose-dependently antagonized the quasi-morphine abstinence activity of NPFF (10 .mu.g) in opiate-naive rats. S.c. injection of dansyl-PQRamide (13 mg/kg) in chronically morphine-infused rats attenuated opiate dependence as indicated by prevention of naloxone-pptd. abstinence syndrome. Dansyl-PQRamide displaced radiolabeled ligand from NPFF receptors in a concn.-dependent manner with a Ki of 13 .mu.M, and had a half-life over 300 times longer than NPFF under aminopeptidase digestion.
- ΙT 175297-56-0P
 - RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (prepn. and prevention of morphine abstinence syndrome)
- L13 ANSWER 22 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- 1995:891533 HCAPLUS ΑN
- DN 123:333407
- TΙ Purification and characterization of carboxypeptidase D, a novel carboxypeptidase E-like enzyme, from bovine pituitary
- ΑU Song, Lixin; Fricker, Lloyd D.
- CS Dep. Mol. Pharmacol., Albert Einstein Coll. Med., Bronx, NY, 10461, USA
- SO J. Biol. Chem. (1995), 270(42), 25007-13 CODEN: JBCHA3; ISSN: 0021-9258
- DT Journal
- LA English
- AB Carboxypeptidase E (CPE) is involved in the biosynthesis of most neuropeptides and peptide hormones. Until recently, CPE was the only intracellular carboxypeptidase thought to be involved in neuroendocrine peptide processing. However, the finding that fat/fat mice, which have a mutation within the CPE gene that inactivates the enzyme, are capable of a reduced amt. of insulin processing suggests that another carboxypeptidase is present within the secretory pathway. The authors have detected a CPE-like enzyme, designated CPD, which has many properties in common with those of CPE. Like CPE, CPD is a metallocarboxypeptidase that has a pH optimum of 5.5-6. The Km and Kcat values for a series of short peptide substrates show only minor differences between CPD and CPE. Several active site-directed inhibitors also show generally similar potency toward the two enzymes, although guanidinoethylmercaptosuccinic acid is approx. 10-fold more potent, and hippuryl-Arg is approx. 100-fold more potent as an inhibitor of CPD than of CPE. A major difference between the two enzymes is the mol. masses; CPE is 50,000-56,000, whereas CPD is approx. 180,000. Also, CPD does not elute from a substrate affinity column when the pH is raised to 8, which elutes CPE, although CPD can subsequently be eluted by arginine. Both CPE and CPD are present in purified bovine

anterior pituitary secretory vesicles, but the tissue distribution of CPD is more uniform than that of CPE. Antisera to the N- and C-terminal regions of CPE do not recognize CPD. The partial N-terminal amino acid sequence of bovine CPD shows 30-40% homol. with an N-terminal region of bovine and rat CPE and 70% homol. with a duck protein known as gp180, a hepatitis B virus particle binding protein that shows 47% homol. to CPE. Taken together, these results suggest that CPD is a novel secretory pathway enzyme that may be the bovine homolog of gp180.

ΙT 87687-43-2

> RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (purifn. and characterization of carboxypeptidase D, novel carboxypeptidase E-like enzyme, from bovine pituitary)

ANSWER 23 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13

AN 1995:864338 HCAPLUS

DN 123:279333

TIIs the glycogen synthase analog C1-peptide a suitable fluorescent substrate for routine measurements of protein kinase C?

ΑU Erdbruegger, Wilhelm; Strohm, Peter; Michel, Martin C.

CS Department of Medicine, University of Essen, Essen, 45122, Germany

SO Cell. Signalling (1995), Volume Date 1995, 7(6), 635-42 CODEN: CESIEY; ISSN: 0898-6568

 $\mathsf{D}\mathsf{T}$ Journal

LAEnglish

- The authors have compared a new com. available non-radioactive protein AB kinase C (PKC) activity assay based on the fluorescent [A9,10K11]glycogen synthase 1-11 analog C1-peptide with a classical radioactive assay based on myelin basic protein4-14 (MBP4-14) and other substrates. The C1-peptide had lower affinity for PKC from rat brain than substrates such as MBP4-14, [S25] PKC.alpha.19-31, and [A9,10K11,12] glycogen synthase 1-12. The sensitivity of the C1-peptide-based assay was considerably lower than that of the MBP4-14-based assay. The C1-peptide was readily degraded in an ATP-independent manner by crude and DEAE-column chromatog.-purified cytosolic exts. from rat brain, rat kidney, SK-N-MC and L929 cells. rat kidney this degrdn. was not prevented by many common protease inhibitors. Phenylsepharose column chromatog. sepd. the C1-peptide degrading activity from PKC. The authors conclude that the C1-peptide-based fluorescent PKC assay is applicable to highly purified PKC prepns. but has low sensitivity and is not applicable to crude exts. due to substrate degrdn.
- ΙT 149901-74-6

RL: ARG (Analytical reagent use); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (glycogen synthase analog C1-peptide as a suitable fluorescent substrate for routine measurements of protein kinase C)

- L13 ANSWER 24 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- ΑN 1995:215838 HCAPLUS

DN 122:31909

TΙ On the Stereoselectivity of the Reaction of N-(9-Phenylfluoren-9yl)aspartate Enolates with Electrophiles. Synthesis of Enantiomerically Pure 3-Hydroxy-, 3-Amino-, and 3-Hydroxy-3-methylaspartates Fernandez-Megia, Eduardo; Paz, Manuel M.; Sardina, F. Javier

ΑU

CS Departamento de Quimica Organica, Universidad de Santiago de Compostela, Santiago de Compostela, 15706, Spain J. Org. Chem. (1994), 59(25), 7643-52

SO CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LAEnglish

OS CASREACT 122:31909; CJACS

GΙ

Efficient and stereoselective prepns. of enantiomerically pure protected (3R)- and (3S)-3-hydroxy- and 3-aminoaspartates I (Pf = 9-phenyl-9-fluorenyl; R1 = H, R2 = OH, NH2; R1 = OH, NH2, R2 = H) by reaction of protected aspartate enolates with electrophilic hydroxylating or aminating reagents were developed. The stereoselectivity of the hydroxylation and amination reactions was dependent on the structure of the enolate (which is strongly affected by the presence of strong metal complexing agents) and whether the electrophile is able to complex the enolate counterion in the transition state of the reaction. A regioselective prepn. of enantiomerically pure protected 3-hydroxy-3-methylaspartates I (R1 = Me, R2 = OH; R1 = OH, R2 = Me) was also developed, albeit with only modest stereoselectivity.

IT 159434-66-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (stereoselective electrophilic hydroxylation and amination of
 (phenylfluorenyl)aspartate enolates)

- L13 ANSWER 25 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1995:136611 HCAPLUS
- DN 122:161309
- TI Synthesis and antimicrobial activity of some new 7-methoxy-4-methylcoumarin-6-sulfonylamino acid derivatives
- AU Ibrahim, T M; Ahmed, F S M; Shedid, S A
- CS Faculty Science, Al-Azhar University, Nasr, Egypt
- SO Proc. Indian Natl. Sci. Acad., Part A (1994), 60(2), 433-9 CODEN: PIPSBD; ISSN: 0370-0046
- DT Journal
- LA English

GI

- AB Title compds. I [X = amino acid, dipeptide; R = OH, OMe, NHNH2] were prepd. from the sulfonyl chloride and amino acid, amino ester, or dipeptide. The amino acid derivs., but not the peptide derivs., have bactericidal activity.
- IT 161256-08-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and antimicrobial activity of some new methoxy(methyl)coumarinsulfonylamino acid derivs.)

- L13 ANSWER 26 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1995:36716 HCAPLUS
- DN 122:133772
- TI Azasulfonamidopeptides as peptide bond hydrolysis transition state analogs. Part 2. Potential HIV-1 proteinase inhibitor
- AU Cheeseright, Timothy J.; Daenke, Susan; Elmore, Donald T.; Jones, John H.
- CS Dyson Perrins Lab., Univ. Oxford, Oxford, OX1 3QY, UK

- SO J. Chem. Soc., Perkin Trans. 1 (1994), (14), 1953-5 CODEN: JCPRB4; ISSN: 0300-922X
- DT Journal
- LA English
- The synthesis of Z-Asn-NHN(CH2Ph)SO2-Pro-Ile-Val-OMe (I; Z = PhCH2O2C), a potential HIV-1 proteinase inhibitor, is described. Thus, Boc-Asn(Trt)-NHNHCH2Ph (Boc = Me3CO2C; Trt = trityl) was coupled with ClSO2-Pro-OCH2Ph to give azasulfonamido peptide Boc-Asn(Trt)-NHN(CH2Ph)SO2-Pro-OCH2Ph, which was further elaborated to I by std. methods. I inhibited the activity of recombinant HIV-1 proteinase in a peptide cleavage assay. with Ki = 27.1 .+-.7.7 .mu.M.
- IT 161001-55-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and HIV-1 proteinase inhibitory activity of)

IT 161001-60-1P

IT 161001-57-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and protective group exchange of)

- L13 ANSWER 27 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1995:33825 HCAPLUS
- DN 122:31870
- TI Synthesis and studies of some new 3-substituted coumarin derivatives
- AU Ibrahim, Tarek M.; Ahmed, Fayek S. M.; Shedid, Said A.
- CS Fac. Sci., Al-Azhur Univ., Nasr, Egypt

Ι

- SO Phosphorus, Sulfur Silicon Relat. Elem. (1994), 86(1-4), 263-8 CODEN: PSSLEC; ISSN: 1042-6507
- DT Journal
- LA English
- GI

- AB The prepn. of different 3-acetamido-coumarin-6-sulfonylamino acids I (X = amino acid, dipeptide group; Y = NHCOMe, NH2, OH) was described. All the 3-amino or 3-hydroxycoumarin-6-sulfonylamino acid derivs. I (Y = NH2; X = amino acid group) and I (Y = OH; X = amino acid group) possess remarkable antimicrobial properties towards different microorganisms; the other I were inactive.
- IT 156773-57-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antimicrobial agent)

- L13 ANSWER 28 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1995:21280 HCAPLUS
- DN 122:10540
- TI Azasulfonamidopeptides as peptide bond hydrolysis transition state analogs. Part 1. Synthetic approaches
- AU Cheeseright, Timothy J.; Edwards, Alison J.; Elmore, Donald T.; Jones, John H.; Raissi, Maryam; Lewis, Elsa C.
- CS Dyson Perrins Lab., Univ. Oxford, Oxford, OX1 3QY, UK
- SO J. Chem. Soc., Perkin Trans. 1 (1994), (12), 1595-600 CODEN: JCPRB4; ISSN: 0300-922X
- DT Journal
- LA English
- OS CASREACT 122:10540
- AB The title compds., a novel class of peptide analogs in which an .alpha.-amino acid residue is replaced by a hydrazine-1,2-diylsulfonyl

group -NHNRSO2-, are of potential interest as proteinase inhibitors. Synthetic approaches to such compds. and the x-ray mol. structures of two examples, AcNHN(CH2Ph)SO2-Gly-OMe and BocNHNHSO2-Pro-OCH2Ph, are reported.

IT 159525-99-2P

L13 ANSWER 29 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1994:509633 HCAPLUS

DN 121:109633

TI Synthesis and studies of some new 3-substituted coumarin derivatives

AU Ibrahim, Tarek M.; Ahmed, Fayek S. M.; Shedid, Said A.

CS Fac. Sci., Al-Azhar Univ., Nasr, Egypt

SO Sulfur Lett. (1994), 17(2), 101-9 CODEN: SULED2; ISSN: 0278-6117

CODEN: SULED2; ISSN: 0278-

DT Journal LA English

GI

$$\begin{array}{c} \text{SO}_2-\text{X}-\text{OR}^1 \\ \\ \text{O} \end{array}$$

The synthesis of different 3-acetamidocoumarin-6-sulfonylamino acids I (R = AcNH, X = .beta.-Ala, Pro, Leu, Met, Phe, R1 = H), the corresponding Me esters I (R1 = Me), dipeptides I (R = AcNH, X = .beta.-Ala-Gly, Pro-Ser, Phe-Val, Leu-Tyr, Met-Phe, R1 = Me), and some related 3-amino- or 3-hydroxy derivs. I (R = H2N, HO) are described. All derivs. I (R = H2N, HO) possess remarkable antimicrobial properties towards different microorganisms.

IT 156773-57-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L13 ANSWER 30 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1994:509623 HCAPLUS

DN 121:109623

TI Synthesis and studies of some new 3-substituted coumarin derivatives

AU Ibrahim, Tarek M.; Ahmed, Fayek S. M.; Shedid, Said A.

Ι

CS Fac. Sci., Al-Azhar Univ., Nasr, Egypt

SO Bol. Soc. Quim. Peru (1993), 59(3), 135-41

CODEN: BSQPAQ; ISSN: 0037-8623

DT Journal

LA English

GI

$$\begin{array}{c} R \\ O \\ O \end{array}$$

The synthesis of different 3-acetamidocoumarin-6-sulfonylamino acids I (R = AcNH, X = .beta.-Ala, Pro, Leu, Met, Phe, R1 = H), the corresponding Me esters I (R1 = Me), dipeptides I (R = AcNH, X = .beta.-Ala-Gly, Pro-Ser, Phe-Val, Leu-Tyr, Met-Phe, R1 = Me), and some related 3-amino- or 3-hydroxy derivs. I (R = H2N, H0) are described. All derivs. I (R = H2N, H0) possess remarkable antimicrobial properties towards different microorganisms.

IT 156773-57-8P

- L13 ANSWER 31 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1994:46125 HCAPLUS
- DN 120:46125
- ${\tt TI}$ Neuropeptide FF receptors: Structure-activity relationship and effect of morphine
- AU Payza, Kemal; Akar, Candan A.; Yang, Hsiu Ying T.
- CS Natl. Inst. Ment. Health Neurosci. Cent., St. Elizabeth's Hosp., Washington, DC, 20032, USA
- SO J. Pharmacol. Exp. Ther. (1993), 267(1), 88-94 CODEN: JPETAB; ISSN: 0022-3565
- DT Journal
- LA English
- AΒ Neuropeptide FF (FLFQPQRFamide, NPFF) is an octapeptide implicated in morphine analgesia, tolerance and dependence. Many of the behavioral effects of NPFF have also been obsd. with the invertebrate neuropeptide Phe-Met-Arg-Phe-amide (FMRFamide), which binds to NPFF receptors because of its low homol. to the C-terminal portion of NPFF. A competitive ligand binding assay was used to characterize NPFF receptors in rat spinal cord and a strong requirement was found for the C-terminal Arg-Phe-amide. It was found that FMRFamide (Ki = 1.8 nM) bound with lower affinity than NPFF (0.26 nM) but it was about 7-fold more potent than PQRFamide (12 nM). This finding explains the similar bioactivities of NPFF and FMRFamide. The Gln2 appeared to be the cause of the relatively low potency of PQRFamide, based on the binding specificity of NPFF receptors for a series of FMRFamide analogs. In contrast to the Arg-Phe-amide, substitutions at the first and second positions of FMRFamide were generally tolerated, with the most potent analogs being PMRFamide (Ki = 0.54 nM), FFRFamide (0.25 ${\tt nM})$ and ${\tt FWRFamide}$ (0.42 ${\tt nM})$. Among the most potent ligands was a pentapeptide contg. a photoreactive Phe analog, D-Tyr-(p-benzoyl-Phe)-Nle-Arg-Phe-amide (Ki = 0.23 nM). It was found that dansyl-PQRFamide and dansyl-RFamide also bound to NPFF receptors with Ki values of 6.1 and 73 nM, resp. The radioligand binding and G-protein coupling of NPFF receptors were not altered by chronic morphine treatment.
- IT 151870-87-0

RL: PROC (Process)

(binding of, by neuropeptide FF receptors of spinal cord, structure in relation to)

- L13 ANSWER 32 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1994:25486 HCAPLUS
- DN 120:25486
- TI Subcutaneous injection of an analog of neuropeptide FF precipitates morphine abstinence syndrome
- AU Malin, David H.; Lake, J. Ronald; Arcangeli, K'Anne R.; Deshotel, Karen D.; Hausam, David D.; Witherspoon, Wendi E.; Carter, Victoria A.; Yang, Hsiu Ying T.; Pal, Biman; Burgess, Kevin
- CS Univ. Houston, Clear Lake, Houston, TX, 77058, USA
- SO Life Sci. (1993), 53(17), PL261-PL266 CODEN: LIFSAK; ISSN: 0024-3205
- DT Journal
- LA English
- AB Neuropeptide FF (NPFF) has been shown to exert various antiopiate actions, including pptn. of opiate abstinence syndrome by third ventricle injection in morphine dependent rats. In the present study, dansyl-Pro-Gln-Arg-Phe-amide, a lipophilic analog of NPFF, was injected into morphine dependent rats and appropriate sham controls at a dose of 9 mg/kg, s.c. Comparison groups were injected with ethanol/water vehicle alone. The NPFF analog pptd. a vigorous opiate abstinence syndrome in morphine dependent rats, but not in sham controls.
- IT 151870-87-0, Dansyl-Pro-Gln-Arg-Phe-amide
 RL: BIOL (Biological study)

(morphine abstinence syndrome induction by, in dependent situation)

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L13
    ANSWER 33 OF 85 HCAPLUS COPYRIGHT 1999 ACS
AN
     1993:626427 HCAPLUS
DN
     119:226427
ΤI
     Peptide aldehydes as antithrombotic agents
ΙN
     Balasubramanian, Neelakantan; St. Laurent, Denis R.
PΑ
     Bristol-Myers Squibb Co., USA
SO
     Eur. Pat. Appl., 55 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
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                           -----
     EP 526877
                      Α2
PΙ
                           19930210
                                          EP 92-113284
                                                          19920804
    EP 526877
                    A3
                           19930407
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                                        19920731
     CA 2075154
                    AA
                           19930207
                                          CA 92-2075154
     JP 07242616
                      Α2
                           19950919
                                          JP 92-206713
                                                          19920803
    US 5380713
                      Α
                           19950110
                                          US 94-226219
                                                          19940411
PRAI US 91-741023 19910806
    CASREACT 119:226427; MARPAT 119:226427
OS
GΙ
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Arginine aldehydes I [R1 and R2 = H or COR [R = H, lower alkyl, benzyl, CH(OAc)Me]; R3 and R4 = H, lower alkyl, benzyl, (un)substituted Ph, (un) substituted C3-7 cycloalkyl; R3R4 = (un) substituted C3-7 cycloalkyl; R3R4 = Ph or arom. ring; R5 = H or lower alkyl; R3R5 or R4R5 may be linked together to form a heterocyclic ring with 3 to 7 carbon atoms; R7 = CHO, CH2OH, CO2H; X = CO, (CH2)m, SO2; Y = (CH2)m, CH2CHNHR8, CHNHR8 [R8 = lower alkyl, benzyl, R1 and R2 as described above, SOR9 where R9 = lower alkyl, C3-7 cycloalkyl, (un) substituted Ph or (un) substituted naphthyl]; R6 = (CH2)m R10 (R10 = Ph, pyridyl, thiophenyl, naphthyl, quinolinyl or C3-7 cycloalkyl); n = -1, -2, 0, 1, 2, 3, 4; m = 0, 1, 2 were prepd. as antithrombotic agents and trypsin inhibitors. Thus, Boc-L-Arg-OH.HCl (Boc = Me3CO2C) was treated with benzyl chloroformate in the presence of Et3N in THF to give 21.6% lactam II (Z = PhCH2O2C, R11 = Boc), which was Boc-deblocked by HCl in CH2C12 and EtOAc to give 97% II.2HCl (R11 = H). The latter was coupled with N-[3-(3-pyridyl)propanoyl]-L-proline by diphenylphosphoryl azide in the presence of Et3N in DMF to give 33% dipeptide lactam III, which was reduced by LiAlH4 in THF to give 57% arginine aldehyde IV (R12 = Z), which was Z-deblocked by hydrogenolysis over Pd/C to give IV.2HCl (R12 = H). Antithrombotic and trypsin-inhibiting activities are given for many tile compds.

IT 150729-18-3P

IT 150729-20-7P 150729-47-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as antithrombotic agent)

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L13 ANSWER 34 OF 85 HCAPLUS COPYRIGHT 1999 ACS
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AN 1993:554888 HCAPLUS

DN 119:154888

TI Non-radioactive enzyme assay for kinases, phosphatases, and proteases

IN Shultz, John W.; White, Douglas H.

PA Promega Corp., USA

SO PCT Int. Appl., 103 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
                      ----
                                           -----
     WO 9310461 A1 19930527 WO 92-US9595 19921112
PΙ
         W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP,
             KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG
                      A1
                                     AU 93-31294
     AU 9331294
                            19930615
                                                           19921112
     JP 07501444
                     T2 19950216 JP 92-509337
A1 19950405 EP 92-925108
                                                           19921112
                                                         19921112
19921012
     EP 646242
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE
     NO 9401781
                                     NO 94-1781
                      A
                            19940629
                                                           19940511
PRAI US 91-791928
                      19911112
     WO 92-US9595
                      19921112
AΒ
     Modified peptide substrate prepd. by labeling the substrates with a
     detector segment or modification tag such as dansyl are used for
     non-radioactive assay of the described enzymes. The method comprises
     incubation of the modified peptide with an (un)pure enzyme sample of
     interest, sepn. of the product peptide by e.g. gel electrophoresis, and
     measuring the product peptide by e.g. fluorescence. The method is rapid
     and highly sensitive. Prepn. of 11 modified peptide substrates for
     fluorescenct and photometric assay of cAMP-dependent protein kinase,
     protein kinase C, modified trypsin, endoprotease C, etc., was shown.
IT
     149901-70-2 149901-74-6
     RL: ANST (Analytical study)
        (for non-radioactive detn. of kinase and/or phosphatase and/or
        protease)
     ANSWER 35 OF 85 HCAPLUS COPYRIGHT 1999 ACS
AN
     1993:554667 HCAPLUS
DN
     119:154667
     Transglutaminases catalyze cross-linking of plasminogen to fibronectin and
TI
     human endothelial cells
ΑU
     Bendixen, Emoke; Borth, Wolfgang; Harpel, Peter C.
     Dep. Med., Mount Sinai Sch. Med., New York, NY, 10029, USA
CS
     J. Biol. Chem. (1993), 268(29), 21962-7
SO
     CODEN: JBCHA3; ISSN: 0021-9258
DT
     Journal
LA
     English
AΒ
     Apolipoprotein (a) is a substrate for transglutaminases. Here it is
     reported that plasminogen, which is homologous to apolipoprotein (a), is
     also modified by these enzymes. Transglutaminases from different sources
     mediated the incorporation of monodansyl-cadaverine into plasminogen,
     indicating the presence of reactive glutamine(s) in plasminogen.
     lysines were also identified using the lysine-decorating peptide
     dansyl-PGGQQIV. In addn., transglutaminases catalyzed the formation of
     plasminogen homopolymers and plasminogen-fibronectin heteropolymers.
     Human umbilical vein endothelial cells cross-linked plasminogen into high
     mol. mass aggregates. Cross-linked plasminogen was cell assocd., and no
     crosslinking of plasminogen was seen in the fluid-phase. Large mol. mass
     plasminogen generated on the human umbilical vein endothelial cell (HUVEC)
     surface could not be eluted with .epsilon.-aminocapoic acid and was
     activatable by tissue plasminogen activator. These results suggest that,
     following non-covalent assocn. of plasminogen with the HUVEC surface, cell
     surface-assocd. transglutaminase catalyzes crosslinking of plasminogen
     into large mol. mass aggregates that can be converted into functional
     plasmin. It is proposed that transglutaminases may function to localize
     plasminogen to cell surfaces and matrixes of tissues.
ΙT
     132686-26-1
     RL: RCT (Reactant)
        (crosslinking of, with plasminogen by plasma and tissue
        transglutaminases of human and lab. animal)
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L13 ANSWER 36 OF 85 HCAPLUS COPYRIGHT 1999 ACS AN 1993:428570 HCAPLUS

DN 119:28570

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TI
    Synthesis of peptides containing a sulfinamide or a sulfonamide
    transition-state isostere
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Moree, Wilna J.; Van Gent, Liesbeth C.; Van der Marel, Gijs A.; Liskamp, ΑU Rob M. J.

CS Gorlaeus Lab., Univ. Leiden, Leiden, 2300 RA, Neth.

Tetrahedron (1993), 49(5), 1133-50 CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

CASREACT 119:28570 OS

GI

SO

AB A versatile synthesis of peptides incorporating sulfinamide or sulfonamide transition state analogs is described. Apart from the easily accessible Gly-X isosteres used as haptens to elicit catalytic antibodies, amino acids other than Gly can be prepd. by .alpha.-alkylation of the sulfonamide-contg. peptides. This is illustrated with the synthesis of a potential HIV-protease inhibitor I (Z = PhCH2O2C).

ΙΤ 148200-74-2P 148261-17-0P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and peptide coupling of, with valine deriv.)

134019-79-7P IT'

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

ΙT 148200-75-3P 148261-18-1P

> RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of, as HIV protease inhibitor)

IT 134019-78-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn., deblocking, and peptide coupling of, with alanine deriv.)

ΙT 148200-85-5P 148261-19-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn., deblocking, and sepn. of, from diastereomer)

ΙT 148200-73-1P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., deprotonation, and benzylation of)

L13 ANSWER 37 OF 85 HCAPLUS COPYRIGHT 1999 ACS

1993:163912 HCAPLUS ΑN

DN 118:163912

TΙ Peculiarities of catalytic effect of .gamma.-thrombin on synthetic low-molecular peptide substrates

ΑU Shvachko, L. P.; Poyarkova, S. A.; Kostyuchenko, N. V.; Kibirev, V. K.

CS

Inst. Bioorg. Khim. Neftekhim., Kiev, Ukraine Ukr. Biokhim. Zh. (1992), 64(4), 34-7 SO CODEN: UBZHD4; ISSN: 0201-8470

DT Journal

LA Russian

AΒ Catalytic parameters of hydrolysis of ester peptide substrates that contain residues of hydrophobic and nonpolar amino acids in P2, P3 subsites have been studied. It is shown that efficiency of hydrolysis by thrombin is detd. by the length of polypeptide chains and by the nature of the amino acids in P2, P3 subsites of the substrate. In spite of the fact that .gamma.-thrombin retains the active conformation of the catalytic center, the local conformation changes of the second binding region of the enzyme have been discovered.

ΙT 126077-78-9

RL: RCT (Reactant)

(reaction of, with .gamma.- and .alpha.-thrombin of human, kinetics of, structure in relation to)

L13 ANSWER 38 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1993:143256 HCAPLUS

DN 118:143256

TI Synthesis and antimicrobial activity of some new 1-acetylaminonaphthalene-4-sulfonylamino acid and dipeptide derivatives

AU El-Sayed, Ragab A.; Khalaf, N. S.; Kota, F. A.; El-Hakim, M. H.

CS Fac. Sci., Al-Azhar Univ., Nasr, Egypt

SO Proc. Indian Natl. Sci. Acad., Part A (1992), 58(4), 389-96 CODEN: PIPSBD; ISSN: 0370-0046

DT Journal

LA English

GΙ

NHAc SO₂R I

The synthesis of different 1-acetylaminonaphthalene-4-sulfonylamino acids (I, R = amino acid radical) and some of their corresponding Me ester and hydrazides is described. Coupling of I with amino acid Me ester hydrochloride in THF-Et3N medium using the carbodimide method furnishes the desired dipeptide Me esters. Hydrazinolysis of the dipeptide Me esters gave the corresponding hydrazides. Most of the compds. were found to possess specific antimicrobial activities against a no. of bacteria.

IT 146233-90-1P 146233-94-5P 146233-98-9P 146234-03-9P 146234-07-3P 146234-11-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. and antibacterial activity of, structure in relation to)

L13 ANSWER 39 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1993:34637 HCAPLUS

DN 118:34637

TI Synthesis and characterization of some collagen sequence analogs

AU Botyanszki, Janos; Bodi, Jozsef; Kajtar, Judit; Ragnarsson, Ulf; Pogany, Gabor; Jeney, Andras; Suli-Vargha, Helga

CS Res. Group Peptide Chem., Hung. Acad. Sci., Budapest, H-1518, Hung.

SO Biochem. Int. (1992), 27(3), 525-34 CODEN: BIINDF; ISSN: 0158-5231

DT Journal

LA English

AB Some analogs of natural collagen sequences (773-779) were synthesized. The peptides were hydrolyzed at the Gly-Ile bond not only by crude collagenase isolated from normal rat liver, but also by the bacterial Clostridium histolyticum collagenase. The reason for the unusual cleavage site in the latter case may lie in the unordered secondary structure of the substrates measured by CD spectroscopy.

IT 102839-04-3P 130778-90-4P 130778-92-6P

145152-94-9P 145152-95-0P 145152-96-1P

145179-70-0P 145179-71-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of, by collagenase, collagen hydrolysis in relation to)

L13 ANSWER 40 OF 85 HCAPLUS COPYRIGHT 1999 ACS

```
1992:611689 HCAPLUS
ΑN
DN
     117:211689
     Optical resolution of racemic amine derivatives
TΙ
IN
     Gamo, Keiji
PΑ
     Nippon Kayaku Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 4 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO. KIND DATE
                                          APPLICATION NO. DATE
     JP 04154732 A2 19920527 JP 90-277791 19901018
PΙ
     Racemic amines are optical resoluted by treating with dansyl-L-proline
AΒ
     (I), sepn. of the obtained amides by chromatog., then detection by
     fluorometry. Amidation of DL-alanine with I in DMF in the presence of
     di-Et cyanophosphate gave a reaction mixt., which was fluorescence
     detected by high-speed liq. chromatog. using aq. MeOH as eluent to give
     amide derivs. of L- and D-alanine at sepn. factor of 1.12.
     25841-36-5 144055-09-4 144055-10-7
TΤ
     144055-18-5
     RL: PROC (Process)
        (sepn. of, by fluorescence chromatog.)
    ANSWER 41 OF 85 HCAPLUS COPYRIGHT 1999 ACS
L13
     1992:551397 HCAPLUS
ΑN
DN
     117:151397
TΙ
     Preparation of peptides as kininogenase inhibitors.
     Szelke, Michael; Evans, David Michael; Jones, David Michael
ΙN
     Ferring Peptide Research Partnership KB, Swed.
PΑ
SO
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                         APPLICATION NO. DATE
                  KIND DATE
     PATENT NO.
                                                            _____
        WO 9204371
PI
         KR, LK, LU, MC, MG, MN, MW, NL, NO, PL, RO, SD, SE, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN,
GR, IT, LU, ML, MR, NL, SE, SN, TD, TG
                     A1 19920330
                                                            19910902
     AU 9184387
                                          AU 91-84387
                                           HU 93-610
                                                            19910902
                      A2
                            19931129
     HU 64084
                     T2
A1
                          19940217
19950517
                                          JP 91-514802
                                                            19910902
     JP 06501461
                                          EP 91-915557
                                                           19910902
     EP 652893
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
                                     ZA 91-7096 19910906
NO 93-731 19930226
     ZA 9107096 A
                            19920429
     NO 9300731
                      Α
                            19930507
                      19900907
PRAI GB 90-19558
     WO 91-GB1479
                      19910902
     MARPAT 117:151397
OS
GΙ
```

AB The title compds. [I; R = H, alkyl; R1 = basic amino acid side chain; A = terminal amino acyl, terminal imino acyl; B = D- or L- amino acid residue; Y = binding enhancing or carbonyl activating group preferably selected

from H, alkyl, fluoroalkyl, etc.; with provisos], useful as kininogenase inhibitors (no data), are prepd. BOC-Arg(Z) 2-OH (Z = benzyloxycarbonyl) was condensed with ClCO2Bu-i, the product was deprotected and then condensed with BOC-Cha-ONSu (Cha = 3-cyclohexylphenylalanine residue), the product was deprotected and then reacted with Z (NMe)-D-Phe-OH, the product was treated with Dess Martin Periodinane, and the product was hydrogenated over Pd/C to give MeD-Phe-Cha-Arg-H.

IT 143127-51-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as kininogenase inhibitor)

- L13 ANSWER 42 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1991:424938 HCAPLUS
- DN 115:24938
- TI Sorting-out of acceptor-donor relationships in the transglutaminase-catalyzed cross-linking of crystallins by the enzyme-directed labeling of potential sites [Erratum to document cited in CA114(15):138651s]
- AU Lorand, L.; Parameswaran, K.; Velasco, P. T.
- CS Dep. Biochem., Mol. Biol. Cell Biol., Northwestern Univ., Evanston, IL, 60208, USA
- SO Proc. Natl. Acad. Sci. U. S. A. (1991), 88(7), 2967 CODEN: PNASA6; ISSN: 0027-8424
- DT Journal
- LA English
- AB Errors in Figure 1 have been cor. The errors were not reflected in the abstr. or the index entries.
- IT 132686-26-1
 - RL: BIOL (Biological study)

(crystallin crosslinking of transglutaminase inhibition by, crystallin acceptor site in relation to (Erratum))

- L13 ANSWER 43 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1991:247732 HCAPLUS
- DN 114:247732
- TI Peptides containing a sulfinamide or a sulfonamide moiety: new transition-state analogs
- AU Moree, W. J.; Van der Marel, G. A.; Liskamp, R. M. J.
- CS Gorlaeus Lab., Univ. Leiden, Leiden, 2300 RA, Neth.
- SO Tetrahedron Lett. (1991), 32(3), 409-12 CODEN: TELEAY; ISSN: 0040-4039
- DT Journal
- LA English
- OS CASREACT 114:247732
- AB A versatile synthesis of two new types of transition-state analogs of the amide bond hydrolysis is described: the sulfinamide and the sulfonamide moiety. These transition-state analogs are part of peptides which will be used for the generation of catalytic antibodies as well as for development of protease inhibitors. Thus, (BocNHCH2CH2S)2 (Boc = Me3CO2C) was treated with 3 equivs. C12 and 2 equivs. Ac2O to give BocNHCH2CH2SOC1. The latter was treated with H-Pro-Gly-NHMe to give BocNHCH2CH2SO-Pro-Gly-NHMe, which was oxidized with NaIO4/RuCl3 to give BocNHCH2CH2SO2-Pro-Gly-NHMe. The latter was Boc-deblocked and then coupled with Boc-Ala-OH to give Boc-Ala-NHCH2CH2SO2-Pro-Gly-NHMe.
- IT 134019-78-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and sequential deblocking and peptide coupling reaction of)

IT 134019-79-7P

- L13 ANSWER 44 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1991:138651 HCAPLUS
- DN 114:138651
- TI Sorting-out of acceptor-donor relationships in the transglutaminase-catalyzed cross-linking of crystallins by the enzyme-directed labeling of potential sites

- ΑU Lorand, L.; Parameswaran, K. N.; Velasco, P. T.
- CS Dep. Biochem., Mol. Biol. Cell Biol., Northwestern Univ., Evanston, IL, 60208, USA
- Proc. Natl. Acad. Sci. U. S. A. (1991), 88(1), 82-3 CODEN: PNASA6; ISSN: 0027-8424
- DT Journal
- LA English
- AΒ The dansyl-conjugated (Dns) peptides Dns-Pro-Gly-Gly-Gln-Gln-Ile-Val and Dns-Ala-Gln-Gln-Ile-Val, patterned on the N-terminal sequence of fibronectin, were synthesized and used for the transglutaminase (EC 2.3.2.13) -directed selective blocking of lens proteins that otherwise might participate in donating lysyl side chains in forming N.epsilon.-(.gamma.-glutamyl)lysine cross-linked oligomers and polymers. Labeling profiles with these peptides could be readily visualized by fluorescence as well as by immunoblotting with anti-dansyl antibody. labeling patterns in rabbit lens homogenates were quite different with the dansylated peptides than those obtained with dansylcadaverine. Use of such glutamine-contg. dansylated peptides should clearly aid in identifying, isolating, and sequencing potential donor substrates of transglutaminases in many biol. systems.
- TΤ 132686-26-1
 - RL: BIOL (Biological study)

(crystallin crosslinking by transglutaminase inhibition by, crystallin acceptor site in relation to)

- ANSWER 45 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- 1991:2883 HCAPLUS
- DN 114:2883
- TIMatrix-assisted laser desorption of peptides in transmission geometry
- AU Vertes, Akos; Balazs, Laszlo; Gijbels, Renaat
- CS Dep. Chem., Univ. Antwerp, Wilrijk, B-2610, Belg.
- Rapid Commun. Mass Spectrom. (1990), 4(7), 263-6 SO CODEN: RCMSEF; ISSN: 0951-4198
- DT Journal
- LA English
- AB The possibility of performing matrix-assisted laser desorption expts. in transmission geometry is demonstrated for two neuropeptides (substance P and bombesin), for six analogs of the MSH core and for collagenase enzyme substrates. Pos.- and neg.-ion spectra of several peptides are produced without the presence of a metallic substrate. Cationized quasi-mol. ions are abundant in the pos. spectra. Peak broadening in the high-mass range can be the consequence of overlapping mol. and adduct ions. The presence of synthesis byproducts can be identified readily from the spectra. Ultimately, picogram detection limits are possible for important bioactive peptides and other large mols. Because of the clearly demonstrated matrix-assisted laser ionization in a homogeneous environment, metal substrate participation in the volatilization mechanism seems less likely.
- IT 130778-91-5 130778-93-7

RL: PRP (Properties)

(mass spectrometry of, matrix-assisted laser desorption)

- L13 ANSWER 46 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- ΑN 1990:612644 HCAPLUS
- DN 113:212644
- TISelective alkaline protease catalyzed hydrolysis of peptide esters
- Chen, Shui Tein; Chang, Chung Ho; Lin, Johnson; Wang, Kung Tsung Grad. Inst. Biochem. Sci., Natl. Taiwan Univ., Taipei, Taiwan ΑU
- CS
- SO J. Chin. Chem. Soc. (Taipei) (1990), 37(3), 299-305 CODEN: JCCTAC; ISSN: 0009-4536
- DTJournal
- LA English
- Procedures for prepg. C-terminal free peptides from hydrolysis of the corresponding Me or benzyl esters catalyzed by alk. protease has been developed. N-protected peptides having side-chain ester protecting groups or successive hydrophobic amino acid residues in its sequence are hydrolyzed selectively at the C-terminal only, and other bonds (.beta. and

.gamma.-ester or peptide bonds) are left intact. Compds. which cause side reactions in base-mediated sapon. could be hydrolyzed safely by this procedure. Products of this hydrolysis are useful intermediates for fragment couplings in solid phase peptide synthesis.

IT 130240-42-5

RL: RCT (Reactant)

(hydrolysis of, in the presence of alcalase, protected C-terminal free peptide from)

IT 130240-61-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, by selective hydrolysis of peptide ester)

L13 ANSWER 47 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1990:607344 HCAPLUS

DN 113:207344

TI Fluorescent oligopeptide substrates for kinetic characterization of the specificity of Astacus protease

AU Stoecker, Walter; Ng, Michael; Auld, David S.

CS Inst. Zool., Univ. Heidelberg, Heidelberg, D-6900, Fed. Rep. Ger.

SO Biochemistry (1990), 29(45), 10418-25 CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

OS CJACS

- AΒ The design of fluorescent N-dansylated oligopeptides based on the tubulin cleavage pattern by Astacus protease yields substrates that are turned over .ltoreq.105 times faster than those presently available. On the basis of this study, an optimal substrate for Astacus protease contain 7 or more amino acids and minimally requires at least 5 amino acids. examn. of the formation and breakdown of the ES complex shows its formation occurs within milliseconds at 25.degree.. The best heptapeptide substrate, dansyl-Pro-Lys-Arg-Ala-Pro-Trp-Val, is cleaved only between the Arg-Ala (P1-P1') bond with kinetic parameters kcat = 380 s-1 and km = 3.7.times. 10-4 M. The presence of lysine or arginine in the P1 and P2 positions yields high-turnover substrates. In the P3 position, the enzyme prefers Pro > Val > Leu > Ala > Gly, following the same order of preference seen in the tubulin cleavage pattern. Substitution of leucine (Leu) for alanine in P1' and of serine for proline in P2' decreases activity by 105- and 102-fold, resp. In position P3', substitution of tryptophan (Trp) for Leu leaves the activity unaltered. However, introduction of the Trp fluorophore greatly enhances the sensitivity of the assay due to a 10-fold increase in indole fluorescence for cleavage of any peptide bond between the tryptophan and the dansyl group. Such an energy-transfer-based assay should have widespread use for detection of neutral proteases. The relationship of Astacus protease to a recently sequenced bone morphogenetic protein and to metalloproteinases which share the putative Zn-binding sequence HExxHxxGxxH (x = amino acid) is discussed.
- IT 129364-28-9

RL: RCT (Reactant)

(reaction of, with proteinase of Astacus fluviatilis digestive tract, kinetics of, structure relation to)

- L13 ANSWER 48 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1990:158955 HCAPLUS
- DN 112:158955
- TI Peptides containing aminobenzoic acids and their antithrombin activity
- AU Podlipskii, V. Ya.; Kostyuchenko, N. V.; Gershkovich, A. A.; Kibirev, V. K.
- CS Inst. Bioorg. Khim., Kiev, USSR
- SO Dokl. Akad. Nauk Ukr. SSR, Ser. B: Geol., Khim. Biol. Nauki (1989), (8), 46-9
- CODEN: DNNADO; ISSN: 0201-8454
- DT Journal
- LA Russian
- AB Arginyl peptides RCONHC6H4CO-Arg-OMe and RCO-Pro-Arg-OMe (R = Ph, Pr) were

prepd. and evaluated as inhibitors of the reaction of thrombin with fibrinogen. The peptides contg. m-aminobenzoic acid (I) show max. retardation, which suggests that proline can be replaced by I in thrombin inhibitors.

IT 126077-78-9

RL: RCT (Reactant)

(antithrombin activity of)

- L13 ANSWER 49 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1988:167952 HCAPLUS
- DN 108:167952
- TI Synthesis and antimicrobial activity of some new N-coumarin-6-sulfonyl amino acid and dipeptide derivatives
- AU El-Naggar, A. M.; Abd El-Salam, A. M.; Ibrahim, T. M.
- CS Fac. Sci., Al-Azhar Univ., Cairo, Egypt
- SO Afinidad (1987), 44(411), 431-3 CODEN: AFINAE; ISSN: 0001-9704
- DT Journal
- LA English
- GI

- Title amino acids I [X = .beta.-Ala, Val, DL-Val, Leu, p-NHC6H4CO (p-Aba), m-NHC6H4CO (m-Aba), Tyr, etc.] were prepd. by sulfonylating the appropriate amino acid with sulfonyl chloride II. I were esterified with MeOH via SOC12 to give the corresponding Me esters. Dipeptides III (X-X1 = .beta.-Ala-DL-Ser, .beta.-Ala-Leu, Pro-Phe, Phe-Val, etc.) were prepd. by coupling the appropriate I with H-X1-OMe.HCl by DCC in THF contg. Et3N. I (X = .beta.-Ala, p-Aba, m-Aba) and the Me esters of I (X = Leu, Pro) were active against a no. of microorganisms.
- IT 113789-71-2P 113789-72-3P 113789-73-4P
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (prepn. and antimicrobial activity of)
- L13 ANSWER 50 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1988:112931 HCAPLUS
- DN 108:112931
- TI Synthesis of some 4-methoxycinnamic acid 2-sulfonylamino acid derivatives and their antimicrobial activity
- AU El-Naggar, A. M.; Ibrahim, T. M.; El-Gazzar, M. A.; Khalaf, N. S.
- CS Fac. Sci., Al-Azhar Univ., Nasr, Egypt
- SO J. Serb. Chem. Soc. (1987), 52(1), 17-24 CODEN: JSCSEN
- DT Journal
- LA English
- GI

AB The synthesis of 4-methoxycinnamic acid 2-sulfonylamino acids (I; R = amino acid residue) and their Me esters and hydrazides and some 4-methoxy-2-(sulfonyl-dipeptide Me ester)cinnamoyl-amino acid Me ester derivs. are described. Twenty two substituted cinnamic acid-sulfonylamino acid derivs. have specific antimicrobial activities against a no. of microorganisms.

L13 ANSWER 51 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1987:614089 HCAPLUS

Ι

DN 107:214089

TI Chromophoric and fluorophoric peptide substrates cleaved through the dipeptidyl carboxypeptidase activity of cathepsin B

AU Pohl, Jan; Davinic, Silvia; Blaha, Ivo; Strop, Petr; Kostka, Vladimir CS Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, CS-16610, Czech.

SO Anal. Biochem. (1987), 165(1), 96-101 CODEN: ANBCA2; ISSN: 0003-2697

DT Journal

English LA The action of bovine spleen cathespin B as a dipeptidyl carboxypeptidase AΒ on newly synthesized substrates of the type peptidyl-X-p-nitrophenylalanyl (Phe(NO2))-Y (where X, Y = amino acid residue) or 5dimethylaminonaphthalene-1-sulfonyl (Dns)-peptidyl-X-Phe(NO2)-Y was investigated. The kinetic parameters of hydrolysis of the X-Phe(NO2) bond were detd. by difference spectrophotometry (.DELTA..epsilon.310 = 1600 M-1 cm-1) or by spectrofluorometry by following the 5-8-fold increase of Dns-group fluorescence (excitation at 350 nm and emission at 535 nm). substrates were moderately sensitive to cathepsin B; kcat (the catalytic const.) was 0.7-s-1 at pH 5 and 25.degree. and Km was 6-240 .mu.M. very acidic optima of pH 4-5 are characteristic for the dipeptidyl carboxypeptidase activity of cathespin B. Bovine spleen cathepsins S and H had little and no activity, resp., when assayed with Pro-Glu-Ala-Phe(NO2)-Gly. These peptides should be a valuable tool for

routine assays and for mechanistic studies on cathepsin B.

IT 108204-49-5
RL: RCT (Reactant)

(reaction of, with cathepsin B, kinetics and mechanism of)

L13 ANSWER 52 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1987:497096 HCAPLUS

DN 107:97096

TI Synthesis of N.alpha.-(tosylprolylglycyl)- and N.alpha.(tosylglycylprolyl)-4-amidinophenylalanine amides as inhibitors of thrombin

AU Voigt, B.; Wagner, G.

CS Sekt. Biowiss., Karl-Marx-Univ., Leipzig, DDR-7010, Ger. Dem. Rep.

SO Pharmazie (1986), 41(6), 378-81 CODEN: PHARAT; ISSN: 0031-7144

DT Journal

LA German

OS CASREACT 107:97096

GΙ

TTI

- Title compds. I (Tos = tosyl; X-X1 = Pro-Gly, Gly-DL-Pro, Gly-Pro; NRR1 = piperidino, pyrrolidino, morpholino, NHBu) were prepd. from the corresponding cyano compds. II via thioamides III and thioimidic esters IV. Tos-X-X1-OH (X-X1 = Pro-Gly, Gly-DL-Pro) were coupled with 4-NCC6H4CH2CH(NH2)CO2H by active ester or mixed anhydride methods to give the corresponding tripeptides, which were amidated with the appropriate amine to give the corresponding II. Peptide V [R2 = PhCH2O2C (Z)] was Z-deblocked and then coupled with Tos-Gly-Cl to give V (R2 = Tos-Gly), which was amidated to give amides II (X-X1 = Gly-Pro; NRR1 = same). I an be used as thrombin inhibitors.

- 109968-74-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and reaction of, with ammonium acetate)
- IT 109947-76-4P 109947-77-5P 109947-78-6P
 109947-79-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
- (prepn. and reaction of, with hydrogen sulfide)
 IT 109947-80-0P 109947-81-1P 109947-82-2P
 109968-73-2P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and S-methylation of)
- L13 ANSWER 53 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1987:492532 HCAPLUS
- DN 107:92532

- TI Synthetic inhibitors of serine proteinases. Part 32: Inhibition of trypsin, plasmin and thrombin by amides of N.alpha.-substituted-4-amidinophenylalanine. Influence of various amino acids and blocking groups of the N.alpha.-residue on the inhibitory activity
- AU Stuerzebecher, J.; Markwardt, F.; Walsmann, P.; Voigt, B.; Wagner, G.
- CS Inst. Pharmakol. Toxikol., Med. Akad., Erfurt, Ger. Dem. Rep.
- SO Pharmazie (1987), 42(2), 114-16 CODEN: PHARAT; ISSN: 0031-7144
- DT Journal
- LA German
- AB Cyclic amides of N.alpha.-arylsulfonylated 4-amidinophenylalanine are specific, highly potent inhibitors of thrombin. Introduction of amino acids between the arylsulfonyl blocking group and amino N influence particularly the antithrombin activity. By the use of glycine as spacer, the compds. become tight-binding thrombin inhibitors, while introduction of other .omega.-amino acids, Gly-Gly, L-proline, Gly-L-Pro, or L-Pro-Gly, reduces the specificity and potency of thrombin inhibition. Substitution of the arylsulfonyl blocking group for a heteroarylsulfonyl residue or an aryl residue causes a decrease in antithrombin activity, while substitution for a benzoyloxycarbonyl blocking group has only slight influence. Thus, the N.alpha.-moiety is of decisive importance for the antithrombin activity of derivs. of 4-amidinophenylalanine.
- IT 109630-05-9 109630-08-2 109630-10-6 109630-18-4 109630-22-0 109630-27-5 109716-07-6 109716-13-4 109716-17-8 109716-20-3 109716-24-7 109716-29-2

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process) (serine proteinases inhibition by, kinetics of)

- L13 ANSWER 54 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1987:210288 HCAPLUS
- DN 106:210288
- TI Analysis of N-dansyl peptide methyl esters by means high performance liquid chromatography and mass spectrometry
- AU Reshetova, O. S.; Onoprienko, V. V.; Rozynov, B. V.; Kozmin, Yu. P.
- CS M. M. Shemyakin Inst. Bioorg. Chem., Moscow, USSR
- SO Bioorg. Khim. (1987), 13(3), 320-37 CODEN: BIKHD7
- DT Journal
- LA Russian
- AB The method proposed for detg. the primary structure of oligopeptides includes partial acid hydrolysis, conversion of the resulting short peptides in Me esters of N-dansyl derivs., and then anal. of the mixts. by the combination of reversed-phase HPLC and mass spectroscopy. The retention times and mass spectral data of amino acids and several peptides and N-dansyl peptide Me esters of products obtained by acid hydrolysis of angiotensin, melittin, etc. are given.
- IT 108353-71-5 108353-88-4 108353-96-4

108375-98-0 108375-99-1

- RL: ANT (Analyte); ANST (Analytical study) (detn. of, in peptide sequencing, by reversed-phase HPLC and mass spectrometry)
- L13 ANSWER 55 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1987:191672 HCAPLUS
- DN 106:191672
- TI A study of the peptidyldipeptidase activity of bovine spleen cathepsin B using synthetic substrates
- AU Pohl, J.; Davinic, S.; Blaha, I.; Strop, P.; Kostka, V.
- CS Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, CS-166 10, Czech.
- SO Cysteine Proteinases Their Inhib., Proc. Int. Symp., 1st (1986), Meeting Date 1985, 73-8. Editor(s): Turk, Vito. Publisher: de Gruyter, Berlin, Fed. Rep. Ger.
 CODEN: 55LGA3
- DT Conference

LA English ΔR reported. 108204-49-5 IT L13 ΑN DN 106:176825 TТ ΑU

Fundamental kinetic data characterizing the peptidyldipeptidase action of cathepsin B on chromophoric and fluorophoric synthetic substrates are

RL: RCT (Reactant) (reaction of, with peptidyldipeptidase of cathepsin B of spleen, kinetics of)

ANSWER 56 OF 85 HCAPLUS COPYRIGHT 1999 ACS 1987:176825 HCAPLUS

Synthesis of N.alpha.-(arylsulfonyl-L-prolyl)- and N.alpha.-(benzyloxycarbonyl-L-prolyl)-D,L-4-amidinophenylalanine amides as inhibitors of thrombin

Voigt, B.; Wagner, G.

Sekt. Biowiss., Karl-Marx-Univ., Leipzig, Ger. Dem. Rep. CS

Pharmazie (1986), 41(4), 233-5 SO CODEN: PHARAT; ISSN: 0031-7144

 DT Journal German LA

CASREACT 106:176825 OS

GI

$$\begin{array}{c|c} & \text{NH} \\ \text{H}_2\text{NC} & \text{CH}_2\text{CHCONR}_2 \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

Title compds. I (R2N = piperidino, pyrrolidino, morpholino, BuNH; R1 = AB tosyl, .beta.-naphthylsulfonyl, PhCH2O2C) were prepd. by condensing R1-Pro-OH with 4-cyanophenylalanine, followed by amidation, hydrosulfenylation, S-methylation, and amination. I are potential thrombin inhibitors.

107994-07-0P 107994-08-1P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation of)

107994-24-1P 107994-25-2P 107994-26-3P TT 107994-27-4P 107994-28-5P 107994-29-6P 107994-30-9P 107994-31-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amination of)

107994-09-2P 107994-10-5P 107994-11-6P TΤ 107994-12-7P 107994-13-8P 107994-14-9P

107994-15-0P 108022-40-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, with hydrogen sulfide)

107994-16-1P 107994-17-2P 107994-18-3P IT 107994-19-4P 107994-20-7P 107994-21-8P

107994-22-9P 107994-23-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and S-methylation of)

107994-32-1P 107994-33-2P 107994-34-3P TT 107994-35-4P 107994-36-5P 107994-37-6P

107994-38-7P 107994-39-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as thrombin inhibitor)

AN 1986:420770 HCAPLUS

DN 105:20770

TI A convenient fluorescent assay for vertebrate collagenases

AU Bond, Michael D.; Auld, David S.; Lobb, Roy R.

CS Harvard Med. Sch., Brigham Women's Hosp., Boston, MA, 02115, USA

SO Anal. Biochem. (1986), 155(2), 315-21 CODEN: ANBCA2; ISSN: 0003-2697

DT Journal

LA English

A versatile, convenient assay for vertebrate collagenases has been AB developed using the fluorescent peptide substrate dansyl-Pro-Gln-Gly-Ile-Ala-Gly-D-Arg. This sequence resembles that of collagen at the site of cleavage but includes modifications designed to eliminate nonspecific hydrolysis by contaminating peptidases. Both human skin fibroblast and bovine corneal cell collagenases cleave the substrate specifically at the Gly-Ile bond. Plasmin, thrombin, trypsin, .alpha.-chymotrypsin, carboxypeptidase B, and bacterial collagenase do not cleave the substrate. Elastase and angiotensin-converting enzyme display 20- and 400-fold less activity than the vertebrate collagenases, resp., and cleave the peptide at different positions. The assay is performed by incubating a 5-25-.mu.L aliquot of trypsin-activated sample with an equal vol. of 2 mM substrate overnight at 33.degree. and pH 7.5. TLC then separates the fluorescent product from the substrate in <20 min and allows the detection of subnanogram levels of collagenase. The assay is applicable to the screening of large nos. of samples under different conditions of pH and ionic strength and is readily adaptable for use in a variety of collagenase-dependent systems, such as assays for collagenase-activating and(or) -inducing factors.

IT 102839-04-3

RL: BIOL (Biological study)

(collagenase of human and lab. animal fluorimetric detn. with)

L13 ANSWER 58 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1986:406667 HCAPLUS

DN 105:6667

TI Chirospecific synthesis of (+)-pilocarpine

AU Compagnone, Reinaldo S.; Rapoport, Henry

CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA

SO J. Org. Chem. (1986), 51(10), 1713-19

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 105:6667; CJACS

GΙ

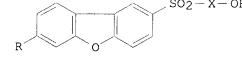
AB An efficient chirospecific synthesis for (+)-pilocarpine (I) used D-methionine or D-2-aminobutanol as chiral educts. Formation of the C3-C4

carbon bond at an early stage gave the key intermediate [cyano((1-tert-butoxycarbonyl)propyl)methyl]phosphonate II, and Wittig coupling of this phosphonate with 1-methyl-5-imiazolecarboxaldehyde introduced the imidazole moiety of the pilocarpine skeleton. Selective redn. of the .alpha.,.beta.-unsatd. nitrile III (R = cyano) to the allylic alc. III (R = HOCH2), stereocontrolled hydrogenation of the olefin, and epimerization of (+)-isopilocarpine to (+)-pilocarpine via kinetic protonation led to the natural alkaloid. This methodol. allows chirospecific syntheses of the 4 possible stereoisomers of pilocarpine. A short and convenient route to (.+-.)-pilocarpine based on II is also described.

- IT 102152-52-3P 102152-53-4P
- L13 ANSWER 59 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1985:505304 HCAPLUS
- DN 103:105304
- TI Synthesis and biological activity of some new dibenzofuran- and 7-nitrodibenzofuran-2-sulfonyl amino acid derivatives
- AU El-Naggar, A. M; Abd El-Salam, A. M; Ahmed, F. S. M.; Ibrahim, T. M.
- CS Fac. Sci., Al-Azhar Univ., Nasr, Egypt
- SO Acta Pharm. Jugosl. (1985), 35(1), 15-22 CODEN: APJUA8; ISSN: 0001-6667
- DT Journal
- LA English
- GΙ







$$\mathsf{SO_2} - \mathsf{X} - \mathsf{X1} - \mathsf{OMe}$$

T

III

- Title amino acid derivs. I (X = .beta.-Ala, Val, Leu, p-NHC6H4CO, Phe, etc.; R = H or NO2) were prepd. by sulfonylating the corresponding amino acid with sulfonyl chlorides II (R = H or NO2). I were esterified with MeOH via SOCl2 to give the corresponding Me esters. Also, I were coupled with amino acid Me ester hydrochlorides by DCC in THF contg. Et3N to give the corresponding dipeptides, e.g. III (X-X1 = DL-Val-DL-Val, Pro-Phe, R = H; X-X1 = Pro-DL-Ser, Leu-Tyr, R = NO2). Nineteen synthesized compds., e.g. I (X = Leu, R = H; X = .beta.-Ala, R = NO2) and III (X-X1 = Tyr-Phe, R = NO2), were active against various microorganisms, e.g. Bacillus subtilis or B. cereus.
- IT 98044-92-9P 98044-93-0P 98044-94-1P 98045-38-6P 98045-39-7P 98045-40-0P

- L13 ANSWER 60 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1985:185498 HCAPLUS
- DN 102:185498
- TI Peptide analogs and their use in enzyme inhibition
- IN Szelke, Michael; Jones, David Michael
- PA UF
- SO Eur. Pat. Appl., 49 pp. CODEN: EPXXDW
- DT Patent

LA	Eng	lish
FAN.	CNT	1

	PA'	TENT NO.		KIND	DATE		AP	PLICATION NO.	DATE
PI		118280 118280			19840912 19890712		EP	84-301297	19840228
		R: AT,	ΒE,	CH, DE	, FR, GB,	IT,	LI,	LU, NL, SE	
	WO			A1			WO	84-GB63	19840228
		W: AU,	DK,	FI, JP	, NO, US				
	ΑU	8426516		A1	19840928		AU	84-26516	19840228
	ΑU	596783		B2	19900517				
	JΡ	60500870		Т2	19850606		JP	84-501509	19840228
	AT	44533		E	19890715		AT	84-301297	19840228
	CA	1322078		A1	19930907		CA	84-448562	19840229
	ES	530262		A1	19851201		ES	84-530262	19840302
	FI	88398		В	19930129		FI	84-4230	19841029
	FI	88398		С	19930510				
	US	4638047		Α	19870120		US	84-668277	19841031
	DK	8405202		A	19841101		DK	84-5202	19841101
	ИО	8404395		Α	19841105		NO	84-4395	19841105
		167809		В	19910902				
	NO	167809		С	19911218				
	US	4772686		A	19880920		US	87-1851	19870109
PRAI		83-5985		19830					
	ΕP	84-301297		19840	228				
	WO	84-GB63		19840	228				
GI									

AΒ Fibrinogen sequence 14-20 analogs R-X-X1-X2-Pro-Arg-X3-R1 [R, R1 = terminal groups optionally including further amino acid residues; X = Gly, Phe, or other lipophilic amino acid residues; X1 = Gly, MeAla, Val, Pro, or ring homolog of Pro; X2 = hydroxy-reduced or oxo dipeptide residue in which the 1st residue is Arg or has an amidino side chain and the 2nd residue is Gly, Ala, or related residue with a hydrocarbon side chain optionally terminated by OH; X3 = Val, Pro, NH(CH2)nCO (n = 0-5)} were prepd. as antithrombotics due to their ability to inhibit thrombin. Thus, H-Arg(Z2)-OH (Z = CO2CH2Ph) was cyclized by DPECI.HCl (N-to give oxazolone I (R2 = H), which was acylated with ClCOCH2CH2COCH2CCl3to give oxazole II, which underwent rearrangement to I (R2 = COCH2CH2CO2CH2Cl3), which was cleaved by pyridine/HOAc and then deesterified by Zn/Na2H2PO4 in THF to give HCO-DL-Arg(Z2)-Gly-OH (III). Boc-Pro-Arg(Z2)-Val-NHEt (Boc = Me3CO2C) was Boc-deblocked and then coupled with III via the pentafluorophenyl (Pfp) active ester to give HCO-Arg(Z2)-Gly-Pro-Arg(Z2)-Val-NHEt, which was deformylated and then coupled with Boc-D-Phe-Pro-OPfp to give Boc-D-Phe-Pro-X4-Gly-Pro-Arg(Z2)-

ΙI

Val-NHEt [IV; X4 = DL-Arg(Z2)], which were sepd. into IV [X4 = D-Arg(Z2)] and IV [X4 = L-Arg(Z2)] (V). V was Z-deblocked by hydrogenolysis to give R3-D-Phe-Pro-Arg-Gly-Pro-Arg-Val-NHEt (VI, R3 = Boc), which was Boc-deblocked by 2N HCl to give VI (R3 = H) (VII). The Ki of VII for human thrombin was 3 .mu.M.

IT 95198-96-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

- L13 ANSWER 61 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1984:419506 HCAPLUS
- DN 101:19506
- TI Purification and characterization of a membrane-bound enkephalin-forming carboxypeptidase, "enkephalin convertase"
- AU Supattapone, Surachai; Fricker, Lloyd D.; Snyder, Solomon H.
- CS Sch. Med., Johns Hopkins Univ., Baltimore, MD, USA
- SO J. Neurochem. (1984), 42(4), 1017-23 CODEN: JONRA9; ISSN: 0022-3042
- DT Journal
- LA English
- AΒ Enkephalin convertase, the enkephalin-synthesizing carboxypeptidase B-like enzyme, was purified to apparent homogeneity from bovine pituitary and adrenal chromaffin granule membranes. The membrane-bound enkephalin convertase can be solubilized in high yield with 0.5% Triton X-100 in the presence of 1M NaCl. Extensive purifn. is achieved by affinity chromatog. with p-aminobenzoyl-L-arginine linked to Sepharose 6B. Enzyme purified from both pituitary and adrenal chromaffin granule membranes shows a single band by SDS-polyacrylamide gel electrophoresis with an apparent mol. wt. of 52,500, whereas enkephalin convertase purified from sol. exts. of these tissues has an apparent mol. wt. of 50,000. The regional distribution of the membrane-bound enzyme in the rat brain differs from that of the sol. enzyme. Whereas the sol. enzyme shows 10-fold variations, resembling somewhat the enkephalin peptides, membrane-bound enkephalin convertase is more homogeneously distributed throughout the brain. In rat pituitary glands, membrane-bound enzyme activity is similar in the anterior and posterior lobes, whereas the sol. enzyme is enriched in the anterior lobe. Membrane-bound and sol. forms of enkephalin convertase isolated from either bovine pituitary glands or adrenal chromaffin granules show identical substrate and inhibitor specificities. As with the sol. enzyme, membrane-bound enkephalin convertase hydrolyzes 5-methionine- and 5-leucine-enkephalin-Arg6 and -Lys6 to enkephalin, with no further degrdn. of the pentapeptide.
- IT 87687-43-2

RL: RCT (Reactant)

(reaction of, with enkephalin convertase of pituitary, kinetics of)

- L13 ANSWER 62 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1984:86129 HCAPLUS
- DN 100:86129
- TI Vasopressin analogs
- IN Brtnik, Frantisek; Barth, Tomislav; Hrbas, Pavel; Jost, Karel; Krejci, Ivan; Kupkova, Bela; Machva, Alena; Servitova, Linda; Skopkova, Jana
- PA Ceskoslovenska Akademie Ved , Czech.
- SO Belg., 13 pp.
 - CODEN: BEXXAL
- DT Patent
- LA French

r Ar	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	BE 896504	A1	19830816	BE 83-210584	19830419
	CS 230315	В	19840813	CS 82-2803	19820420
	CS 231749	В1	19841214	CS 82-8301	19821119
	DK 8301538	A	19831021	DK 83-1538	19830407
	GB 2121049	A1	19831214	GB 83-9736	19830411
	GB 2121049	B2	19850417		

	SE	8302075	A		19831021	SE	83-2075	19830414
	SE	460050	В		19890904			
	SE	460050	С		19900118			
	NL	8301320	А		19831116	NL	83-1320	19830415
	FR	2525215	A1		19831021	FR	83-6357	19830419
	FR	2525215	В1		19860228			
	JΡ	58222059	A2	:	19831223	JP	83-67891	19830419
	JΡ	01021160	В4		19890419			
	CH	653345	А		19851231	CH	83-2098	19830419
	DE	3314357	A1		19831027	DE	83-3314357	19830420
	US	4482486	А		19841113	US	83-486863	19830420
	JΡ	01085999	A2		19890330	JP	88-145941	19880615
PRAI	CS	82-2803	198	204	120			
	CS	82-8301	198	211	119			
GI								

CH2 — CH2 — CH2 RCHCO-Tyr-Phe-Gln-Asn-NHCHCO-Pro-X-OH I

AB Vasopressin analogs I [R = H, X = D-Arg, Z = CH2S (II); R = NH2, X = D-Arg, L-Orn, Z = S2] were prepd. Thus, treatment of Nps-Pro-OC6H2Cl3-2,4,5 (Nps = o-O2NC6H4S) with H-Arg(Tos)-OCH2Ph (Tos = tosyl) in DMF gave Nps-Pro-Arg(Tos)-OCH2Ph. The latter was Nps-deblocked and then coupled with 1-desamino-1-carbapressinoic acid by DCC/N-hydroxybenzotriazole in DMF to give the protected peptide, which was deblocked by acidolysis to give II. The products are biolog. less active (.apprx.2-3 times) than arginine-vasopressin.

IT 88865-02-5

RL: RCT (Reactant)

(partial deblocking-peptide coupling reaction of)

L13 ANSWER 63 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1983:590344 HCAPLUS

DN 99:190344

TI Purification and characterization of enkephalin convertase, an enkephalin-synthesizing carboxypeptidase

AU Fricker, Lloyd D.; Snyder, Solomon H.

CS Sch. Med., Johns Hopkins Univ., Baltimore, MD, 21205, USA

SO J. Biol. Chem. (1983), 258(18), 10950-5

CODEN: JBCHA3; ISSN: 0021-9258

DT Journal

LA English

AΒ

Enkepahlin convertase (I), an enkephalin-synthesizing carboxypeptidase present in adrenal medulla chromaffin granules, was also detected in brain and pituitary. To det. whether these 3 carboxypeptidase activities represent the same enzyme, I was purified and characterized from adrenal medulla, whole brain, and whole pituitary. I from all 3 tissues copurified on DEAE-cellulose, gel filtration, concanavalin A, and L-arginine affinity columns, resulting in a 135,000-fold, 110,000-fold, and 2800-fold purifn. for bovine adrenal medulla, brain, and pituitary I, resp. Purified I appeared homogeneous on SDS-polyacrylamide gel electrophoresis, showing a single band with an apparent mol. wt. of 50,000 for enzyme isolated from all 3 tissues. Adrenal, brain, and pituitary I were similarly inhibited by hexapeptide enkephalin precursors and active site-directed inhibitors. Both [Met] - and [Leu] enkephalin-Arg6 inhibited I with Ki values between 50 and 80 .mu.M, whereas [Met] - and [Leu]enkephalin-Lys6 were 3-fold less potent. Two active site-directed inhibitors, guanidinopropylsuccinic acid and guanidinoethylmercaptosuccini c acid, were potent inhibitors of all 3 enzymes with Ki values of 8-9 nM. A series of dansylated di-, tri-, and tetrapeptide substrates were hydrolyzed by I with similar kinetic properties (Km, Vmax, and kcat/Km) for the 3 enzymes. Thus, I activity represents the same enzyme in adrenal medulla, brain, and pituitary. I may be involved in the prodn. of other peptide neurotransmitters and hormones besides enkephalin.

IT 87687-43-2

RL: RCT (Reactant)

(reaction of, with enkephalin convertase, kinetics of)

- L13 ANSWER 64 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1983:576262 HCAPLUS
- DN 99:176262
- TI Synthesis and biological activity of some new quinoline-8-sulfonylamino acid and dipeptide derivatives
- AU El-Naggar, A. M.; Abd El-Salam, A. M.; Ahmed, F. S. M.; Latif, M. S.; El-Cady, F. E.
- CS Fac. Sci., Al-Azhar Univ., Nasr-City, Egypt
- SO Acta Pharm. Jugosl. (1983), 33(2), 103-10 CODEN: APJUA8; ISSN: 0001-6667
- DT Journal
- LA English

GI

III

Title amino acids I (X = Val, DL-Val, Leu, Phe, DL-Phe, Pro, Tyr, Trp, Thr, Met; R = OH) were prepd. in 54-95% yields by treating sulfonyl chloride II with amino acids. Ornithine and lysine derivs. III (n = 3, 4) were also prepd. Dipeptides IV (X = Val, X1 = Ala, Ser, Phe; X = DL-Val, X1 = Leu; X = Phe, X1 = Val, Phe, Tyr; X = Pro, X1 = Ser, Leu, DL-Leu, Phe, Tyr) were prepd. in 53-87% yields by coupling amino acids I (R = OH) with H-X1-OMe.HCl by DCC in DMF/dioxane contg. Et3N. IV were converted into the corresponding hydrazides. Amino acid Me esters I (X = Val, Ser, Phe, Tyr; R = OMe) were prepd. in 68-92% yields by treating II with H-X-OMe.HCl. I (X = Val, Ser; R = NHNH2) were prepd. by hydrazinolysis of the corresponding Me esters. I (X = Val; R = OH, OMe, NHNH2) exhibited antifungal activity against Penicillium chrysogenum, but they were inactive against several bacteria (e.g., Bacillus subtilis). The other compds. were inactive against the tested microorganisms.

 SO_2-X-X^1-OMe

IT 87650-82-6P 87650-83-7P 87650-84-8P

87650-85-9P 87650-86-0P

- IT 87650-93-9P 87650-94-0P 87650-95-1P
 - 87650-96-2P 87650-97-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L13 ANSWER 65 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1983:89932 HCAPLUS

DN 98:89932

TI Tripeptide derivatives

PA Mitsubishi Chemical Industries Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 57145846	A2	19820909	JP 81-175909	19811102
	JP 58030300	B4	19830628		

AB Tripeptides R-Pro-X-Gly-Pyrr (I; R, X = Bz, Leu; Bz, Phe; Bz, Glu; Bz, Met; Bz, Tyr; Bz, Cys; dansyl, Leu; Pyrr = 1-pyrrolidinyl) were prepd., e.g., by condensation of R-Pro-OH (II) with H-X(OCH2Ph)-Gly-Pyrr.HCl (III) in the presence of DCC followed by hydrogenation in the presence of Pd. I had collagen synthesis inhibitory activity. Thus, 0.01 mol Me3CO2C-Glu(OCH2Ph)-Gly-Pyrr was treated with EtOAc contg. 10% aq. HCl 2 h to give III (X = Glu), which was condensed with 0.01 mol II (R = Bz) in CH2Cl2 in the presence of 2.3 g DCC 1 h at 0-5.degree. to give 83% Bz-Pro-Glu(OCH2Ph)-Gly-Pyrr (IV). Hydrogenation of IV in MeOH in the presence of Pd black gave I (R = Bz, X = Glu) quant.

IT 59191-26-3P

L13 ANSWER 66 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1982:424249 HCAPLUS

DN 97:24249

TI Chromogenic enzyme substrate

IN Voelter, Wolfgang; Echner, Hartmut; Philapitsch, Anton

PA Immuno A.-G. fuer Chemisch-Medizinische Produkte, Austria

SO Ger. Offen., 70 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

11111.011 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3108322	A1	19811224	DE 81-3108322	19810305
PRAI AT 80-1468	19800	318		
CT				

Peptide nitroanilides I [R = H, alkyl, PhSO2, p-MeOC6H4SO2 (Mbs), acyl; R1 = halo; X = amino acid or peptide residue; X1 = Arg, D-Arg, Lys, D-Lys, Orn, D-Orn] were prepd. as chromogenic substrates for the detn. of proteolytic enzymes. Thus, Z-Arg(NO2)-OH (Z = PhCH2O2C) was treated with o-chloro-p-nitrophenyl isocyanate in HMPT contg. Et3N to give 82.02%

nitroanilide II (R2 = Z), which was Z-deblocked by HBr/HOAc to give 80.8% II.HBr (R2 = H), which was coupled with Me3CO2C-Pro-OH by DCC/hydrobenzotriazole in DMF contg. N-methylmorpholine to give 51.56% II (R2 = Me3CO2C-Pro). The latter was deblocked by HF/anisole to give peptide nitroanilide III (R3 = H), which was coupled with Mbs-.beta.-Ala-OH by DCC/N-hydroxysuccinimide in DMF contq. N-methylmorpholine to give 78.45% III (R3 = Mbs-.beta.-Ala) (IV). IV was used as a chromogenic substrate for thrombin, trypsin, Factor Xa, plasmin, and kallikrein. 81242-86-6P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) ANSWER 67 OF 85 HCAPLUS COPYRIGHT 1999 ACS 1982:187106 HCAPLUS 96:187106 Cosmetics containing peptides Kanebo Cosmetics, Inc., Japan; Mitsubishi Chemical Industries Co., Ltd. Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF Patent Japanese FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE JP 57002213 A2 19820107 JP 80-76267 19800605 Cosmetics, which consist of a mixt. of A-(Pro)n-Phe-B-Pro-C (A = H, benzoyl, acetyl, formyl, tolyl, etc.; Pro = L-prolyl; Phe = L-phenylalanyl; B = L-prolyl or glycyl; C = OH or org. group residue reactive to carboxyl groups; n = 1 or 2) and bases, are nonirritating, stable, compatible to skin, etc. Thus, a lotion was prepd. contg. EtOH 10.0, Bz-Pro-Phe-(Pro)2OH (Bz = benzoy1) [81456-52-2], Bu p-hydroxybenzoate 0.1, perfumes 0.1, glycerol 2.0, propylene glycol 2.0, Me p-hydroxybenzoate 0.1, and distd. H2O 85.68 parts. 81456-54-4 RL: BIOL (Biological study) (cosmetics contg.) ANSWER 68 OF 85 HCAPLUS COPYRIGHT 1999 ACS 1982:163183 HCAPLUS 96:163183 Recognition and utilization of dansyl-dipeptides in manual dansyl-Edman sequencing Simanis, Viesturs; Barker, David G.; Bruton, Chris J. Dep. Biochem., Imp. Coll., London, UK Int. J. Pept. Protein Res. (1982), 19(1), 67-70 CODEN: IJPPC3; ISSN: 0367-8377 Journal English The chromatog. behavior of the dansyl dipeptides likely to be encountered in manual dansyl-Edman sequencing is presented. The dansyl dipeptides were obtained in exptl. sequencing and/or by chem. synthesis. The advantages of using short hydrolysis times and deliberately generating these dipeptides are discussed. 25841-36-5P 74260-42-7P 81377-32-4P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and chromatog. behavior of) ANSWER 69 OF 85 HCAPLUS COPYRIGHT 1999 ACS 1982:40888 HCAPLUS 96:40888 Oligopeptides as cosmetic bases Kanebo Cosmetics, Inc., Japan; Mitsubishi Chemical Industries Co., Ltd. Jpn. Kokai Tokkyo Koho, 6 pp.

IΤ

L13

AN DN

ΤI

PΑ

SO

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LA

PΙ

AΒ

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ΑN DN

ΤI

ΑU

CS

SO

DT

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AB

ΤТ

L13

AN DN

ΤI

PΑ

SO

DТ

CODEN: JKXXAF

Patent

LA Japanese FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 56115707 A2 19810911 JP 80-18155 19800215

- AB Tri- or tetrapeptides represented by A-Pro-B-C-D-E where A = H, benzoyl, l-adamantanecarbonyl, etc.; Pro = L-proline; B = L-leucine, L-phenylalanine, L-methionine, etc.; C = glycine, sarcosine, or proline; D = L-proline or pyrrolidine; and E = OH, alkoxy, amino, etc., are used as cosmetic bases, since these peptides are stable and prevent aging effects on the skin. Thus, a mixt. of EtOH 10, Bz-Pro-Leu-Sar-Pro-OH [80238-40-0] 0.02, Bu p-hydroxybenzoate 0.1, and a perfume 0.1 parts was added to another mixt. consisting of glycerin 2, propylene glycol 2, Me p-hydroxybenzoate 0.1, and water 85.68 parts. The efficacy of this skin lotion was compared with that of com. products.
- L13 ANSWER 70 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1980:563452 HCAPLUS

DN 93:163452

- TI Active site mapping of human and rat urinary kallikreins by peptidyl chloromethyl ketones
- AU Kettner, Charles; Mirabelli, Christopher; Pierce, Jack V.; Shaw, Elliott

CS Biol. Dep., Brookhaven Natl. Lab., Upton, NY, 11973, USA

SO Arch. Biochem. Biophys. (1980), 202(2), 420-30 CODEN: ABBIA4; ISSN: 0003-9861

DT Journal

LA English

AB

- The reactivity of human and rat urinary kallikrein was detd. with peptides of arginine and lysine chloromethyl ketone. Pro-Phe-ArgCH2Cl, the reagent corresponding to the sequence of kininogen hydrolyzed by kallikrein, was considerably more effective than reagents contg. other substituents in the P1 and P2 positions (the arginine and phenylalanine binding sites, resp.). Pro-Phe-ArgCH2Cl inactivates the human enzyme at the 10-5M level (Ki 45 .mu.M, k2 0.36 min-1) and the rat enzyme at the 10-6M level (Ki 4.8 .mu.M, k2 0.26 min-1). More effective reagents were obtained by substitution of D-phenylalanine for the P3 proline and addn. of a dansyl residue in the P4 position, yielding reagents effective at the 10-7M level for both kallikreins. Expansion of the sequence of kininogen to accommodate the P4 and P5 binding sites of kallikrein resulted in a reagent, Phe-Ser-Pro-Phe-ArgCH2Cl, which is .apprx.6-fold more reactive than the corresponding tripeptide analog for human kallikrein, whereas for rat kallikrein, the tri- and pentapeptide analogs are comparable in reactivity. The importance of arginine in the Pl position and phenylalanine in the P2 positions in the sequence of kallikrein's physiol. substrate in detg. specificity was shown by comparison of the reactivities of the proteases with Ala-Phe-ArgCH2Cl and Ala-Phe-LysCH2Cl and with Pro-Phe-ArgCH2Cl and Pro-Gly-ArgCH2Cl. Substitution of lysine for the Pl arginine and substitution of glycine for the P2 phenylalanine decreased the reactivity of the reagent 10- and 150-fold, resp., for human kallikrein and 200- and 250-fold, resp., for rat kallikrein. Substitution of L-amino acid residues for the P3 proline had little effect on the reactivity of human kallikrein with the affinity labels and decreased the reactivity of the rat enzyme with the affinity labels from 3- to 6-fold.
- IT 71259-32-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn of and kallikrein of urine inactivation by, structure in
 relation to)

IT 74431-05-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L13 ANSWER 71 OF 85 HCAPLUS COPYRIGHT 1999 ACS AN 1980:464476 HCAPLUS

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DN 93:64476
```

- TI Interaction of dansylated peptidyl chloromethanes with trypsin, chymotrypsin, elastase, and thrombin
- AU Penny, Glenn S.; Dyckes, Douglas F.
- CS Dep. Chem., Univ. Houston, Houston, TX, 77004, USA
- SO Biochemistry (1980), 19(13), 2888-94 CODEN: BICHAW; ISSN: 0006-2960
- DT Journal
- LA English
- A series of N.alpha.-1-(dimethylamino)-5-naphthalenesulfonyl (dansyl) AB derivs. of peptidyl chloromethanes (chloromethyl ketones) were synthesized and employed to introduce the fluorescent dansyl moiety specifically into the active sites of proteinases via affinity labeling. Dansylalanyllysylchloromethane (DALCM) was utilized to inactivate and fluorescently label trypsin and the trypsin-like enzyme, thrombin. Dansylleucylphenylalanylchloromethane (DLPCM) was synthesized and selectively employed as an inhibitor of chymotrypsin. The di-, tri-, and tetrapeptides [dansylprolylalanylchloromethane (DPACM), dansylalanylprolylalanylchloromethane (DAPACM), and dansylprolylalanylprolylalanylchloromethane (DPAPACM)] were synthesized and their interaction with elastase was evaluated. The compds. DALCM, DLPCM, and DAPACM all proved to be effective, fast-acting proteinase inhibitors. Studies of energy transfer in the enzyme-inhibitor conjugates led to results entirely consistent with the proposed conformational homol. of thrombin with the other serine proteinases studied. The fluorescent affinity labels are believed to possess enormous potential for the localization, isolation, and characterization of enzymes.
- IT 73634-64-7 73634-66-9

RL: BIOL (Biological study)
 (elastase inhibition by)

- L13 ANSWER 72 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1980:464285 HCAPLUS
- DN 93:64285
- TI Determination of coagulase of Staphylococcus by the end-point method using a chromagenic synthetic substrate
- AU Igarashi, Hideo; Takahashi, Masashige; Morita, Takashi; Iwanaga, Sadaaki
- CS Doeiken, Japan
- SO Nippon Saikingaku Zasshi (1980), 35(1), 300 CODEN: NSKZAM; ISSN: 0021-4930
- DT Journal
- LA Japanese
- AB Tosyl-Pro-Gly-Arg-p-nitroanilide (I) was used as a chromogenic substrate for the detn. of coagulase (II) activity; the enzyme activity was detd. by measuring the p-nitroaniline released at 405 nm. Thus, 50 .mu.L samples (5-50 .mu.g II/mL) was incubated with a mixt. consisting of 700 .mu.L Tris-HCl buffer (0.15M, pH 8.4), 400 .mu.L I (10 times the Km value concn.), and 50 .mu.L human prothrombin (100 .mu.g/mL) in the cold (0.degree.) for 25 min, and the absorbance was measured at 405 nm. A pos. correlation was obsd. between the 405-nm absorbance and the II concn. in the range 5-30 .mu.g/mL. For samples contg. <1 .mu.g II/mL, the system was modified by incubating at 37.degree., mixing with 100 .mu.L each of 0.1% NaNO2, 0.5% ammonium sulfamic acid, and 0.1% N-(1-naphthyl)ethylenediamine-diHCl; the diazo deriv. of p-nitroaniline formed was measured at 545 nm. The modified method was sensitive and accurate in the range 0.125-1 .mu.g II/mL.
- IT 74474-86-5

RL: BIOL (Biological study)

(as chromogenic substrate for staphylocoagulase detn.)

- L13 ANSWER 73 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- AN 1980:440671 HCAPLUS
- DN 93:40671
- TI Separation of alkylaminonaphthylenesulfonyl peptides and amino acids by high-performance liquid chromatography. Methods for measuring melanotropin inhibiting factor breakdown

```
ΑU
     Hui, Koon-Sea; Salschutz, Michael; Davis, Bruce A.; Lajtha, Abel
     Cent. Neurochem., Rockland Res. Inst., Ward's Island, NY, 10035, USA
CS
     J. Chromatogr. (1980), 192(2), 341-50
CODEN: JOCRAM; ISSN: 0021-9673
SO
DT
     Journal
     English
LA
     N, N-Di-Me, di-Et, di-Pr, di-Bu (Bns), and N-monoisopropylaminonaphthylenes
AB
     ulfonyl derivs. of melanotropin inhibiting factor (MIF) and its
     metabolites were prepd., and their chromatog. behavior was investigated
     with thin-layer chromatog. (TLC) and high-performance liq. chromatog.
     (HPLC), using 5 solvent systems on polyamide layers and 10 solvent systems
     on .mu.Bondapak C18 and .mu.Bondapak Ph columns. A mixt. of MIF and its
     metabolites derivatized with dansyl chloride was adequately resolved by
     2-dimensional chromatog. on polyamide layer with solvent systems,
     HCO2H-H2O (3:97) and C6H6-HOAc (9:1). Bns-MIF and its metabolites were
     sepd. with .mu.Bondapak C18 column with the solvent system MeCN-0.01M
     Na2SO4 buffer, pH 7 (50:50). They were sepd. into 5 groups: Gly and Bns
     acid; Pro-Leu, Leu-Gly and Leu; Pro; Gly-NH2; and MIF. The
     alkylaminonaphthylenesulfonyl derivs. had strong fluorescence, which
     permitted their detection at 10-11-10-9 mol. Dansyl-MIF and its derivs.
     had the lowest detectable amts. HPLC with the aid of the dansyl
     derivatization is reliable and fast, and is the preferable method for
     study of neuropeptide breakdown.
TT
     74260-41-6 74260-42-7 74260-45-0
     74260-46-1 74260-53-0 74260-60-9
     74260-61-0 74260-67-6 74260-68-7
     74260-75-6
     RL: ANT (Analyte); ANST (Analytical study)
        (chromatog. of)
L13 ANSWER 74 OF 85 HCAPLUS COPYRIGHT 1999 ACS
     1979:519375 HCAPLUS
AΝ
DN
     91:119375
TΙ
     Inactivation of the plasminogen activator from HeLa cells by peptides of
     arginine chloromethyl ketone
ΑU
     Coleman, Patrick; Kettner, Charles; Shaw, Elliott
CS
     Biol. Dep., Brookhaven Natl. Lab., Upton, NY, 11973, USA
SO
     Biochim. Biophys. Acta (1979), 569(1), 41-51
     CODEN: BBACAQ; ISSN: 0006-3002
DT
     Journal
     English
LA
AB
     The binding specificities of human urinary urokinase and HeLa cell
     plasminogen activator were studied using peptidyl chloromethyl ketone
     inhibitors. A 125I-labeled fibrin assay was developed to yield kinetic
     information. Reagents of the sequence X-Gly-ArgCH2Cl were the most
     effective. The susceptibility of the HeLa cell plasminogen activator
     differed from that of urokinase in several respects, indicating the
     utility of this type of inhibitor in distinguishing between proteases of
     this specificity.
ΙT
     71259-32-0
     RL: BIOL (Biological study)
        (plasminogen activator and urokinase inactivation by)
L13
     ANSWER 75 OF 85 HCAPLUS COPYRIGHT 1999 ACS
AN
     1978:529505 HCAPLUS
DN
     89:129505
TΙ
     Penicillin derivatives
ΤN
     Morita, Yoshimi; Komata, Kenzo; Oya, Junichi; Wagatsuma, Kazuo; Shirasaka,
     Mitsubishi Chemical Industries Co., Ltd., Japan
PA
     Japan. Kokai, 6 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
```

APPLICATION NO.

FAN.CNT 1

PATENT NO.

KIND DATE

PI JP 53056687 A2 19780523 JP 76-131491 19761101

AB K salts of penicillin derivs. I [R = H2NCO (D-prolyl), H2NCO (DL-prolyl), 4-MeC6H4SO2 (DL-prolyl), Ac (DL-prolyl)] were prepd. by reaction of the corresponding prolines or their reactive derivs. with ampicillin. I had antibacterial activity against gram pos. and neg. bacteria. The min. inhibitory concns. of I against Staphylococcus aureus were 0.25-1.25 .mu.g/mL. Thus, stirring ClCO2Bu-iso, N-carbamoyl-D-proline, and Et3N in CH2C12 30 min at -40.degree., followed by mixing with ampicillin-3H2O and 0.35 mL Et3N in CHCl3 90 min at 0.degree. gave, after treatment with K 2-ethylhexanoate, 56% K salt of I.H2O [R = H2NCO, (D-prolyl)].

L13 ANSWER 76 OF 85 HCAPLUS COPYRIGHT 1999 ACS

AN 1978:406561 HCAPLUS

DN 89:6561

TI Peptide derivative useful in measuring collagenase activity

IN Sakakibara, Shumpei; Nagai, Yutaka; Fujiwara, Kenji; Sakai, Takahiro

PA Ajinomoto Co., Inc., Japan

SO Ger. Offen., 38 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN CNT 2

LAN.	CNT 2			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PΙ	DE 2702699	A1 19771215	DE 77-2702699	19770124
	JP 52091829	A2 19770802	JP 76-6926	19760124
	JP 53028165	A2 19780316	JP 76-103505	19760830
	JP 58043389	B4 19830927		
	JP 53028166	A2 19780316	JP 76-103506	19760830
PRAI	JP 76-6926	19760124		
	JP 76-103505	19760830		
	JP 76-103506	19760830		

AB R-X-Gly-X1-Ala-Gly-X2-OH (R = hydrophobic, neutral acid chromophore; X = X3, Pro-X3; X4 = Ile, Leu; X2 = Glu-D-Arg, D-Arg; X3 = amino acid) were prepd. as substrates for measuring collagenase activity. Thus, BOC-Gln-D-Arg(NO2)-OCH2Ph (BOC = Me3CO2C) was BOC-deblocked and coupled to BOC-Ile-Ala-Gly-OH by Me2N(CH2)3N:C:NEt (WSCI)/1-hydroxybenzotrizole (HOBT) to give the protected pentapeptide which was BOC-deblocked and coupled to DNP-Pro-Gln-Gly-OH (DNP = 2,4-O2NC6H3) by WSCI/HOBT to give the protected octapeptide which was deblocked with HF to give DNP-Pro-Gln-Gly-Ile-Ala-Gly-Gln-D-Arg-OH. The octapeptides were substrates for collagenase, but the heptapeptides, which do not contain the N-terminal proline residue, were not active substrates.

IT 65080-28-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as collagenase substrate)

L13 ANSWER 77 OF 85 HCAPLUS COPYRIGHT 1999 ACS AN 1978:23410 HCAPLUS

```
88:23410
DN
TΙ
     Peptides
     Sakakibara, Shunpei; Nagai, Hiroshi; Fujiwara, Kenji; Sakai, Takahiro
ΙN
PA
     Ajinomoto Co., Inc., Japan
     Japan. Kokai, 13 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 2
     PATENT NO. KIND DATE APPLICATION NO. DATE
     JP 52091829 A2 19770802

SE 7700582 A 19770725

SE 431201 B 19840123

SE 431201 C 19840503

US 4138394 A 19790206

DE 2702699 A1 19771215

US 4176009 A 19791127

JP 76-6926 19760124

JP 76-103505 19760830

JP 76-103506 19760830

US 77-761020 19770121
                                            JP 76-6926 19760124
PΤ
                                                               19770120
                                              SE 77-582
                                           US 77-761020 19770121
DE 77-2702699 19770124
                             19791127 US 77-853302
                                                               19771121
PRAI JP 76-6926
                     19770121
     US 77-761020
AB
     Four peptides, R-L-Gln-Gly-L-Ile-L-Ala-Gly-L-Gln-D-Arg-OH [R = DNP-L-Pro
     [I, DNP = 2,4-(O2N)2C6H3], DNP, p-(4-hydroxy-1-naphthylazo)phenylsulfonyl-
     L-Pro, p-phenylazobenzoyl], useful as reagents in measurement of
     collagenase activity, were prepd. Thus, treating Boc-L-Ile-L-Ala-Gly-OH
     (Boc = Me3CO2C) with Boc-L-Gln-D-Arg(NO2)-OCH2Ph gave Boc-L-Ile-L-Ala-Gly-
     L-Gln-D-Arg(NO2)-CH2Ph, which was treated with DNP-L-Pro-L-Gln-Gly-OH to
     give, after deprotection, I.
ŢΤ
     65080-28-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
L13 ANSWER 78 OF 85 HCAPLUS COPYRIGHT 1999 ACS
     1978:23408 HCAPLUS
AN
DN
     88:23408
TΙ
     Tri- and tetrapeptides
ΙN
     Takeuchi, Tadashi; Sato, Shigeru; Umezu, Kohei
PΑ
     Mitsubishi Chemical Industries Co., Ltd., Japan
     Japan. Kokai, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
                      KIND DATE
     PATENT NO.
                                             APPLICATION NO. DATE
                             -----
     _____
                                              _____
     JP 52083545 A2 19770712
JP 57020298 B4 19820427
                              19770712
                                              JP 76-217
PΤ
                                                               19760101
AΒ
     A-Pro-B-C-D-E (I; A=H, Bz, 1-adamantanecarbonyl, dansyl; B=Leu, Phe,
     Met, Cys, Glu, Trp, Tyr; C = Gly, sarcosyl; D = Pro, pyrrolidinyl; E = HO,
     lower alkoxy, aralkyloxy, NH2; when D = pyrrolidinyl, then E is
     eliminated) were prepd. I had collagen synthesis-inhibiting and
     wound-healing activities. Thus, 1.1 g Et3N and 2.3 g
     dicyclohexylcarbodiimide were added to a mixt. of 3.7 g Bz-Pro-Phe-OH and
     3.0 Gly-Pro-OCH2Ph.HCl in CH2Cl2 at 0-5.degree. and the whole was stirred
     2 h to give 70% Bz-Pro-Phe-Gly-Pro-OCH2Ph. Among 23 addnl. I prepd. were
     Bz-Pro-Leu-Gly-Pro-OCH2Ph, Bz-Pro-Tyr-Gly-Pro-OCH2Ph, dansyl-Pro-Leu-Gly-
     Pro-OCH2Ph, and adamantyl-Pro-Leu-Gly-Pro-OCH2Ph.
     59191-11-6P 59191-13-8P 59191-18-3P
     59191-19-4P 59191-26-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
L13 ANSWER 79 OF 85 HCAPLUS COPYRIGHT 1999 ACS
ΑN
     1977:439470 HCAPLUS
DN
     87:39470
```

- TΙ .alpha.-Acylaminobenzylpenicillin derivatives for antibiotics
- ΙN Morita, Yoshiharu; Omata, Kenzo; Ohya, Junichi; Wagatsuma, Kazuo; Shirasaka, Tadashi
- PA Mitsubishi Chemical Industries Co., Ltd., Japan
- SO Ger. Offen., 43 pp. CODEN: GWXXBX

DT Patent LA German

FAN.	CNT	1					
	PAT	CENT NO.	KIND	DATE	AP	PLICATION NO.	DATE
ΡI		2640432	A1	19770317	DE	76-2640432	19760908
		52033689	A2	19770314		75-108708	19750908
		52033690	A2	19770314		75-108709	19750908
		52095687	A2	19770811		76-12119	19760206
	JΡ	52095688	A2	19770811	JΡ	76-12121	19760206
		52097992	A2	19770817		76-15335	19760214
	JΡ	52100488	A2	19770823 .	JP	76-15563	19760216
	US	4111932	A	19780905		76-713808	19760812
	GB	1570381	A	19800702		78-24678	19760820
	CH	605980	A	19781013		76-11340	19760907
	FR	2322598	A1	19770401		76-27034	19760908
	US	4179437	A	19791218	US	78-899458	19780424
	US	4220587	Α	19800902	US	78-915481	19780614
PRAI	JΡ	75-108708	19750	908			
	JΡ	75-108709	19750	908			
	JΡ	76-12119	19760	206			
	JР	76-12121	197602	206			
	JΡ	76-15335	197602	214			
	JP	76-15563	19760	216			
	JΡ	75-103708	197509	908			
	US	76-713808	197608	312			
GI							

Penicillins I [RR1 = (CH2)2-4, CH2CH2CO, CH2CH(OH)CH2, o-CH2C6H4CH2, o-C6H4CH2; R = Me, CH2CHMe2, R1 = Me; R2 = H, OH] and some N-protected AΒ intermediates were prepd. Thus, ampicillin was treated with N-(benzyloxycarbonyl)-D-proline and hydrogenated over Pd-BaCO3 to give 67% I [RR1 = (CH2)3, R2 = H], which had a min. inhibitory concn. against Staphylococcus aureus (FDA 209P) of 0.45 .mu.g/mL.

Ι

IT 63169-16-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and deblocking of)

- ANSWER 80 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13
- ΑN 1976:180643 HCAPLUS
- 84:180643 DN
- ΤI Tri-, tetrapeptides, and their derivatives
- ΙN Takeuchi, Tadashi; Sato, Shigeru; Umezu, Kohei
- PΑ Mitsubishi Chemical Industries Co., Ltd., Japan
- SO Japan. Kokai, 9 pp.
- CODEN: JKXXAF
- DT Patent

```
LΑ
     Japanese
FAN.CNT 1
                                             APPLICATION NO. DATE
     PATENT NO. KIND DATE
                             DAIE
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                                             -----
                        A2 19760130
                                             JP 74-82778 19740719
     JP 51011761
PΙ
     JP 51011761 A2 19760130
JP 57019097 B4 19820420
     A-Pro-B-C-D-E (I; A = H, Bz, 1-adamantanecarbonyl, dansyl; B = Leu, Phe,
AΒ
     Met, Cys, Glu, Trp, Tyr; C = Gly, sarcosyl; D = Pro, pyrrolidinyl; E = HO,
     lower alkoxy, aralkyloxy, NH2; when D = pyrrolidinyl, then E is
     eliminated) were prepd. I had collagen synthesis-inhibiting and
     wound-repairing activities. Thus, 1.1 g Et3N and 2.3 g
     dicyclohexylcarbodiimide were added to a mixt. of 3.7\ {\rm g} Bz-Pro-Phe-OH and
     3.0 g Gly-Pro-OCH2Ph.HCl in CH2Cl2 at 0-5.degree. and the whole was
     stirred 2 hr to give 70% Bz-Pro-Phe-Gly-Pro-OCH2Ph. Among 23 addnl. I
     prepd. were Bz-Pro-Leu-Gly-Pro-OCH2Ph, Bz-Pro-Tyr-Gly-Pro-OCH2Ph,
     dansyl-Pro-Leu-Gly-Pro-OCH2Ph, and adamantyl-Pro-Leu-Gly-Pro-OCH2Ph.
     59191-11-6P 59191-13-8P 59191-18-3P
IT
     59191-19-4P 59191-26-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
L13 ANSWER 81 OF 85 HCAPLUS COPYRIGHT 1999 ACS
AN
     1976:165199 HCAPLUS
DN
     84:165199
     Chromogenic or fluorescent substrate for enzyme determination
ΤI
     Svendsen, Lars G.
ΙN
PΑ
     Pentapharm A.-G., Switz.
SO
     Ger. Offen., 67 pp.
     CODEN: GWXXBX
DT
     Patent
     German
FAN.CNT 1
                                             APPLICATION NO. DATE
     PATENT NO. KIND DATE
     ______
                                              _____
     DE 2527932 A1 19760122
DE 2527932 C2 19830421
CH 609154 A 19790215
                            19760122
                                             DE 75-2527932
                                                                19750623
PΤ
                                              CH 74-9210
                                                                19740702
     ZA 7504019 A 19760526
NO 7502386 A 19760105
NO 147212 B 19821115
NO 147212 C 19830223
                                                                 19750624
                                              ZA 75-4019
                                              NO 75-2386
                                                                19750630
     NO 147212 C 19830223
DD 120715 C 19760620
US 4016042 A 19770405
CA 1049506 A1 19790227
NL 7507802 A 19760106
NL 188354 B 19920102
NL 188354 C 19920601
AU 7582631 A1 19770106
SE 424635 B 19820802
SE 424635 C 19821111
                                              DD 75-186968
                                                                19750630
                                              US 75-592023
                                                                19750630
                                              CA 75-230464
                                                                19750630
                                              NL 75-7802
                                                                19750701
                                              AU 75-82631
                                                                19750701
                                                                19750701
                                              SE 75-7545
                      С
                             19821111
     SE 424635
                       A1 19751103
     BE 830911
                                             BE 75-157901
                                                                19750702
                       A1 19760213
                                              FR 75-20756
                                                                19750702
     FR 2279106
                       В1
                            19810430
     FR 2279106
                                             JP 75-81754
                                                                19750702
     JP 51029998
                       A2 19760313
     JP 56022280
                       B4
                              19810523
PRAI CH 74-9210
                       19740702
     CH 75-6088
                       19750509
     R1-Pro-X-Arq-R2 [X = Phe, Tyr, C-phenylglycine, or .beta.-
AB
     cyclohexylalanine residues; R1 = e.g., Ac, Bz, 4-H2NC6H4CO,
     4-H2NC6H4CH2CO, tosyl, 4-(aminomethyl)cyclohexylcarbonyl,
     .omega.-aminocaproyl, PhCH2CH2CO, 4-MeC6H4CO; R2 = NHC6H4NO2-4, NHR3, R3 =
     2-naphthyl, 4-methoxy-2-naphthyl](18 compds.), useful for detg. enzymes in
     blood plasma by observing a shift to higher wavelengths in the uv spectra
     after cleavage by the enzyme, e.g., plasmin, trypsin, thrombin, were
     prepd. by std. coupling methods.
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IT

59188-46-4P 59188-47-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

- ANSWER 82 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13
- 1973:97995 HCAPLUS ΑN
- DN 78:97995
- N-Terminal groups in mass spectrometry of peptides. New and useful ΤI derivatives
- Day, Richard A.; Falter, Herman; Lehman, James P.; Hamilton, Robert E. AII
- CS Dep. Chem., Univ. Cincinnati, Cincinnati, Ohio, USA
- J. Org. Chem. (1973), 38(4), 782-8 SO CODEN: JOCEAH
- DT Journal
- LA English
- AB In an effort to find volatile peptide derivatives with mass spectrometric fragmentation characteristics suitable for peptide sequencing studies, twenty new N-terminal blocking groups were used to derivatize the test peptide Val-Ile-Ala. Electron impact mass spectra were obtained for the deriv. esters and compared to the previously reported spectra of the test peptide in terms of relative intensity of mol. and N-terminal sequence Thirty-four derivs. were compared in all. The most successful of these in terms of ease of interpretation were the 5-(N,Ndimethylamino)naphthalenesulfonyl, p-dimethylaminobenzylidene, and 4-(N,N-dimethylamino)naphthylidene derivs. The intensities of the mol. ions were 10-100 times greater relative to the base peak than in previously reported spectra of derivs. of Val-Ile-Ala. The M-56 ions, ascribed as arising from a McLafferty rearrangement and loss of C4H8 from the isoleucyl residue, did not appear from most of the derivs. displaying relatively intense mol. ions. The apparent inverse relationships between the relative intensities of mol. ions and the corresponding M-56 ions was attributed to ionization potential effects. Selection of the appropriate derivs. of the more complex peptides, Pro-Val-Ile-Ala, Met-Val-Ile-Ala, ${\tt Glu-Try-Glu,\ Gly-Pro-Gly-Gly,\ Gly-Gly-Gly-Gly-Gly-Gly,\ and\ the\ gastrin}$ C-terminal fragment, Try-Met-Asp-Phe-NH2 led to mass spectra contg. sufficient information to allow sequence assignment in every instance; however, the amino acid compn. was required in some cases.
- 40759-98-6 ΙT

RL: PRP (Properties)

(mass spectroscopy of)

- ANSWER 83 OF 85 HCAPLUS COPYRIGHT 1999 ACS L13
- AN1971:126040 HCAPLUS
- 74:126040 DN
- Photolysis of dansyl amino acids and dansyl peptides ΤI
- D'Souza, Leo; Bhatt, Kumud; Madaiah, M.; Day, Richard A. ΑU
- Dep. Chem., Univ. Cincinnati, Cincinnati, Ohio, USA CS
- SO Arch. Biochem. Biophys. (1970), 141(2), 690-3 CODEN: ABBIA4
- DT Journal
- LA English
- GΙ For diagram(s), see printed CA Issue.
- AΒ Dansyl amino acids and dansyl peptides were photolyzed in soln. (pH .gtoreq. 7) to give I, the corresponding amino acid or peptide, and NH3. In acidic solns., the yield of amino acid and (or) peptide was good while that of NH3 was low or negligible. The highest quantum yields of cleavage of the sulfonamide bond were obsd. in acid. Dansyltryptophan and dansylated peptides contg. tryptophan were cleaved at slower rates and with less specificity than other derivs. The rate of photolysis at a given light flux was dependent on the pH. The mechanism involved a hydrolysis of the deriv. in the excited state.
- ΙT 31944-27-1

RL: RCT (Reactant)

(photolysis of)

- L13 ANSWER 84 OF 85 HCAPLUS COPYRIGHT 1999 ACS
- 1968:69316 HCAPLUS

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DN
     68:69316
     Peptide synthesis of a new collagenase substrate by the Merrifield method
TI
ΑU
     Schoellmann, Guenther
CS
     Sch. of Med., Tulane Univ., New Orleans, La., USA
     Hoppe-Seyler's Z. Physiol. Chem. (1967), 348(12), 1629-32
SO
     CODEN: HSZPAZ
DT
     Journal
LA
     German
     The synthesis of 1-di-methylaminonaphthalene - 5 -
AB
     (sulfonyl)prolylleucylglycylprolylarginine (I) utilized the solid-phase
     method of Merrifield. 1-Dimethylaminonaphthalene-5-sulfonyl chloride was
     treated with proline, to produce the proline deriv. which was purified by
     gel filtration on Sephadex G-10 and then incorporated into the peptide
     portion. On thin-layer chromatog. on silica gel G eluted with
     CHCl3-MeOH-HOAc (75:20:5) the proline deriv. had a Rf 0.73. Similarly I
     eluted with CHCl3-MeOH-17% NH4OH (2:2:1) had an Rf 0.74. I was purified
     by gel filtration on CM-Sephadex G-25. I is fluorescent and is suitable
     as a substrate for the detn. of collagenases.
IT
     17303-45-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     17191-42-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, on solid-phase polymer)
    ANSWER 85 OF 85 HCAPLUS COPYRIGHT 1999 ACS
L13
AN
    1968:22261 HCAPLUS
DN
     68:22261
ΤI
     Preparation of peptides
ΙN
     Hoffman, Eliahu
PA
     Yissum Research Development Co.
SO
     Fr., 3 pp.
     CODEN: FRXXAK
DT
     Patent
T.A
    French
FAN.CNT 1
     PATENT NO. KIND DATE
                                          APPLICATION NO. DATE
                            19661007
PΙ
    FR 1454653
                     19641029
PRAI GB
    A new method of prepn. of peptides is described. (Z = PhCH2O2C and Tos =
     p-MeC6H4S02 throughout this abstr.) Thus, a soln. of 6.1 g. methyl
     benzyloxycarbonylglycinate and 0.0435 mole free guanidine in 20 cc. anhyd.
     EtOH is left at room temp. several hrs. to give 5.5 g.
     benzyloxycarbonylglycylguanidine (I), m. 152.degree. (water, EtOH-EtOAc,
     or MeNO2). A soln. of 1.25 g. I in 5 cc. HCONMe2 is mixed with 0.7 g.
     glycinate hydrochloride in water, the pH adjusted to 8.0 with NaOH, the
     soln. stirred at room temp. overnight and evapd. to dryness in vacuo, and
     the residue treated with water to give 1.35 g. ethyl Z-Gly-Gly-OEt. In a
     similar way the following products are prepd.: 51% Z-dl-Ala-Gly-
     NHC(:NH)NH2, m. 175-6.degree.; 50% Z-dl-Ala-Gly-Gly-OEt, m. 110.degree.;
     benzyloxycarbonyl-1-valylguanidine; 23% Z-1-Val-Gly-OEt, m. 166.degree.;
     87.6% hippurylguanidine, m. 182.degree.; 76% ethyl hippurylglycinate, m.
     118.degree.. A soln. of 1.17 g. N-formyl-L-phenylalanylguanidine in 10
     cc. HCONMe2 is mixed with 0.7 g. ethyl glycinate hydrochloride in 1.5 cc.
     water, the pH adjusted to 8, the soln. stirred at room temp. overnight and
     evapd. to dryness in vacuo, and the residue treated with aq. 10% Na2-CO3
     to give 1.13 g. CHO-L-Phe-Gly-OEt m. 132.degree. (water), [.alpha.]
     4.6.degree. (c 1.6, anhyd. EtOH). In a similar way the following products
     are prepd.: 71% CHO-L-Val-Gly-OEt m. 155.degree.; 68% Tos-L-Pro-Gly-OEt m.
     84-6.degree., [.alpha.]23D -115.8.degree. (c 4.5, anhyd. EtOH).
TT
     4172-31-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
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 between 1907-1966 are available in the PAGE display formats.
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=> s 112
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    ANSWER 1 OF 2 COPYRIGHT 1999 ACS
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    ANSWER 2 OF 2 COPYRIGHT 1999 ACS
    CA63:18255f CAOLD
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                                99 HIGHEST RN 220222-35-5
DICTIONARY FILE UPDATES: 9 MAR
TSCA INFORMATION NOW CURRENT THROUGH JUNE 29, 1998
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Please note that search-term pricing does apply when

conducting SmartSELECT searches.

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L12 ANSWER 1 OF 629 REGISTRY COPYRIGHT 1999 ACS
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Absolute stereochemistry.

RN 220202-30-2 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C35 H46 N4 O8 S

SR CA

LC STN Files: CAPLUS

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 3 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

RN 220187-84-8 REGISTRY

INDEX NAME NOT YET ASSIGNED CN

FS STEREOSEARCH

C26 H33 N3 O6 S MF

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 59 OF 629 REGISTRY COPYRIGHT 1999 ACS 220186-99-2 REGISTRY L12

RN

INDEX NAME NOT YET ASSIGNED CN

FS STEREOSEARCH

C21 H24 N2 O6 S MF

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L12 ANSWER 68 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 220177-04-8 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C22 H26 N2 O6 S

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L12 ANSWER 69 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 220176-98-7 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C21 H25 N3 O5 S

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L12 ANSWER 119 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 220150-61-8 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C30 H34 N4 O5 S2

SR CA

LC STN Files: CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L12 ANSWER 121 OF 629 REGISTRY COPYRIGHT 1999 ACS

220149-86-0 REGISTRY RN

CNINDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

C24 H31 N3 O5 S MF

SR CA

STN Files: CAPLUS LC

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ANSWER 184 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

RN

220148-99-2 REGISTRY INDEX NAME NOT YET ASSIGNED CN

FS STEREOSEARCH

C33 H38 N4 O8 S2 MF

SR CA

STN Files: CAPLUS LC

Absolute stereochemistry.

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L12 ANSWER 196 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 218602-52-9 REGISTRY

CN 2-Pyrrolidinecarboxamide, N-[(1S)-1-formyl-2-phenylethyl]-1-(phenylsulfonyl)-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C20 H22 N2 O4 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:81806

L12 ANSWER 198 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217479-41-9 REGISTRY

CN L-Tyrosine, N-[[(4S)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl]-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C21 H24 N2 O6 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52733

L12 ANSWER 199 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217453-75-3 REGISTRY

CN L-Phenylalanine, 1-(phenylsulfonyl)-L-prolyl-.beta.-methyl-, methyl ester, (.beta.R)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C22 H26 N2 O5 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52724

L12 ANSWER 239 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217452-99-8 REGISTRY

CN L-Phenylalanine, 1-[(3,5-dichlorophenyl)sulfonyl]-L-prolyl-4-[(4fluorophenyl)methyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H25 C12 F N2 O5 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52724

L12 ANSWER 286 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217451-99-5 REGISTRY

CN L-Tyrosine, 1-[(phenylmethyl)sulfonyl]-L-prolyl-O-(1,1-dimethylethyl)-(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C25 H32 N2 O6 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52724

L12 ANSWER 324 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217450-98-1 REGISTRY

CN 2-Naphthalenepropanoic acid, .alpha.-[[[(4R)-3-[(3,5-

dichlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)-

(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C23 H20 C12 N2 O5 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52724

L12 ANSWER 348 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217326-95-9 REGISTRY

CN L-Phenylalanine, 1-(phenylsulfonyl)-L-prolyl-4-iodo-.beta.-methyl-, methyl

ester, (.beta.R) - (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C22 H25 I N2 O5 S

SR CA

LC STN Files: CA, CAPLUS

REFERENCE 1: 130:52736

L12 ANSWER 382 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 217325-98-9 REGISTRY

CN L-Alanine, 1-[(3,5-dichlorophenyl)sulfonyl]-L-prolyl-3-[2'-

[(dimethylamino)carbonyl][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C29 H29 C12 N3 O6 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:52736

L12 ANSWER 424 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 204981-65-7 REGISTRY

CN L-Argininamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-leucyl-L-alanyl-(2S)-2-aminooctanoyl-L-tryptophyl-L-alanyl-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H79 N13 O9 S

SR CA

LC STN Files: CA, CAPLUS

REFERENCE 1: 128:241112

L12 ANSWER 435 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 202282-11-9 REGISTRY

CN 1-Piperazinecarboxylic acid, 4-[1-(phenylsulfonyl)-L-prolyl-L-leucyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H40 N4 O6 S

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:136515

L12 ANSWER 436 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 202281-13-8 REGISTRY

CN 2-Pyrrolidinecarboxamide, N-[3-methyl-1-(1-piperazinylcarbonyl)butyl]-1-(phenylsulfonyl)-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C21 H32 N4 O4 S

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

REFERENCE 1: 128:136515

L12 ANSWER 437 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 192722-90-0 REGISTRY

CN 2-Pyrrolidinecarboxamide, N-[(1S)-1-formyl-2-phenylethyl]-1-[(4-methylphenyl)sulfonyl]-, (2R)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Pyrrolidinecarboxamide, N-(1-formyl-2-phenylethyl)-1-[(4-methylphenyl)sulfonyl]-, [R-(R*,S*)]-

FS STEREOSEARCH

MF C21 H24 N2 O4 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:81806

REFERENCE 2: 130:66800

REFERENCE 3: 127:121991

L12 ANSWER 441 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 190252-08-5 REGISTRY

CN Glycine, 1-[[4-[1-oxo-2-[4-(1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-L-prolyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H33 N3 O7 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

REFERENCE 1: 129:175653

REFERENCE 2: 127:5005

L12 ANSWER 442 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 189256-05-1 REGISTRY

CN L-Phenylalanine, 1-[[2-[[(phenylmethoxy)carbonyl]amino]ethyl]sulfonyl]-L-prolyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C24 H29 N3 O7 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:305778

L12 ANSWER 445 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 188446-57-3 REGISTRY

CN L-Serine, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-leucyl-L-tyrosyl-L-glutaminyl-L-glutaminyl-L-isoleucyl-L-isoleucyl-L-glutaminyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-asparaginyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C83 H127 N19 O23 S

SR CA

LC STN Files: CA, CAPLUS

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HO S N H S N O
$$i-Bu$$
 S N O $i-Bu$ S N O

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:234874

L12 ANSWER 450 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 185321-83-9 REGISTRY

CN L-Prolinamide, 1-(2-naphthalenylsulfonyl)-L-prolyl-L-seryl-L-tyrosyl-D-.alpha.-aspartyl-L-leucyl-L-arginyl-N-ethyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C50 H69 N11 O13 S

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.

PAGE 1-B

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:55103

L12 ANSWER 451 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 175297-56-0 REGISTRY

CN L-Argininamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-glutaminyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H41 N9 O6 S

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

REFERENCE 1: 124:251755

L12 ANSWER 452 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 161256-08-2 REGISTRY

CN L-Serine, N-[1-[(7-methoxy-4-methyl-2-oxo-2H-1-benzopyran-6-yl)sulfonyl]-L-prolyl]-, methyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C20 H24 N2 O9 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:161309

L12 ANSWER 453 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 161001-60-1 REGISTRY

CN L-Valine, N-[N-[1-[[2-[1,4-dioxo-2-[[(phenylmethoxy)carbonyl]amino]-4-[(triphenylmethyl)amino]butyl]-1-(phenylmethyl)hydrazino]sulfonyl]-L-prolyl]-L-isoleucyl]-, methyl ester, (S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C55 H65 N7 O10 S

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 122:133772 REFERENCE

ANSWER 456 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

RN 159525-99-2 REGISTRY

L-Valine, N-[N-[1-[[2-[(1,1-dimethylethoxy)carbonyl]-1-[[2-[(1,1-dimethylethoxy)carbonyl]]]CN

(phenylmethyl)hydrazino]sulfonyl]-L-prolyl]-L-isoleucyl]-, methyl ester (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C29 H47 N5 O8 S MF

SR CA

CA, CAPLUS LC STN Files:

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:10540

ANSWER 457 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

159434-66-9 REGISTRY RN

L-Aspartic acid, 3-[(9-phenyl-9H-fluoren-9-yl)amino]-N-[1-(phenylsulfonyl)-CN

L-prolyl]-, dimethyl ester, threo- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C36 H35 N3 O7 S

SR CA

LC STN Files: CA, CAPLUS Absolute stereochemistry. Rotation (-).

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:31909

L12 ANSWER 458 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 156773-57-8 REGISTRY

CN L-Serine, N-[1-[[3-(acetylamino)-2-oxo-2H-1-benzopyran-6-yl]sulfonyl]-L-prolyl]-, methyl ester (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C20 H23 N3 O9 S

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:31870

REFERENCE 2: 121:109633

REFERENCE 3: 121:109623

L12 ANSWER 459 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 151870-87-0 REGISTRY

CN L-Phenylalaninamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-glutaminyl-L-arginyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C37 H50 N10 O7 S

SR CA

LC STN Files: CA, CAPLUS, MEDLINE, TOXLINE, TOXLIT

REFERENCE 1: 120:46125

REFERENCE 2: 120:25486

L12 ANSWER 460 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 150729-47-8 REGISTRY

CN 2-Pyrrolidinecarboxamide, N-[4-[(aminoiminomethyl)amino]-1-formylbutyl]-1[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-, [S-(R*,R*)]- (9CI) (CA
INDEX NAME)

FS STEREOSEARCH

MF C23 H32 N6 O4 S

CI COM

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 119:226427

L12 ANSWER 463 OF 629 REGISTRY COPYRIGHT 1999 ACS

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RN 149901-74-6 REGISTRY

CN L-Lysine, N2-[N-[N-[N-[N-[N-[N-[N-[N-[N-[1-[[2(or 4)-[3,6-bis(diethylamino)xanthylium-9-yl]-5-sulfophenyl]sulfonyl]-L-prolyl]-L-leucyl]-L-seryl]-L-arginyl]-L-threonyl]-L-leucyl]-L-seryl]-L-valyl]-L

alanyl]-L-alanyl]-, inner salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Xanthylium, L-lysine deriv.

FS PROTEIN SEQUENCE

MF C77 H119 N17 O21 S2

CI IDS

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-B

PAGE 2-A

$$\mathbb{E}_{t_2N}$$
 \mathbb{O}_+ \mathbb{N}_{t_2}

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:279333

REFERENCE 2: 119:154888

L12 ANSWER 465 OF 629 REGISTRY COPYRIGHT 1999 ACS RN 148261-19-2 REGISTRY

 $L-I soleucinamide, \ 1-[[1-[[((1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-[(1,1-dimethylethoxy)carbonyl]amino[(1,1-di$ CN phenylethyl]sulfonyl]-L-prolyl-N-methyl-, (R)- (9CI) (CA INDEX NAME)

MF C26 H42 N4 O6 S

CA SR

CA, CAPLUS, CASREACT STN Files: LC

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 119:28570 REFERENCE

ANSWER 468 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

148200-85-5 REGISTRY RN

L-Isoleucinamide, 1-[[1-[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-indimethyl]CN phenylethyl]sulfonyl]-L-prolyl-N-methyl-, (S)- (9CI) (CA INDEX NAME)

C26 H42 N4 O6 S MF

SR CA

CA, CAPLUS, CASREACT LC STN Files:

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 119:28570 REFERENCE

L12 ANSWER 472 OF 629 REGISTRY COPYRIGHT 1999 ACS

146234-11-9 REGISTRY RN

 $L-Leucine, \ N-[1-[[4-(acetylamino)-1-naphthalenyl]sulfonyl]-L-prolyl]-, \\$ CN hydrazide (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C23 H31 N5 O5 S MF

SR CA

STN Files: CA, CAPLUS LC

1: 118:143256 REFERENCE

ANSWER 475 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

146233-98-9 REGISTRY RN

 $L-Leucine, \ N-[1-[[4-(acetylamino)-1-naphthalenyl]sulfonyl]-L-prolyl]-, \\$ CN methyl ester (9CI) (CA INDEX NAME)

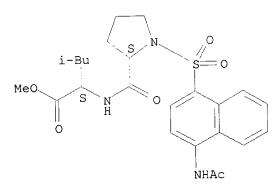
STEREOSEARCH FS

C24 H31 N3 O6 S MF

SR CA

CA, CAPLUS LC STN Files:

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 118:143256 REFERENCE

ANSWER 478 OF 629 REGISTRY COPYRIGHT 1999 ACS

145179-71-1 REGISTRY RN

CN naphthalenyl]sulfonyl]-L-prolyl]-L-glutaminyl]glycyl]-L-isoleucyl]-Lalanyl]glycyl]glycyl]glycyl]- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

MF C42 H61 N11 O13 S

SR CA

CA, CAPLUS LC STN Files:

PAGE 1-A

$$HO_2C$$
 HO_2C
 HO_2

PAGE 1-B

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 118:34637 REFERENCE

L12 ANSWER 480 OF 629 REGISTRY COPYRIGHT 1999 ACS

145152-96-1 REGISTRY RN

D-Lysinamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-glutaminylglycyl-L-isoleucyl-L-alanylglycyl- (9CI) (CA INDEX NAME) CN

PROTEIN SEQUENCE; STEREOSEARCH FS

C41 H63 N11 O10 S MF

SR CA

CA, CAPLUS STN Files: LC

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 118:34637 REFERENCE

ANSWER 483 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

144055-18-5 REGISTRY L-Alanine, N-[1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl]-RN CN

(9CI) (CA INDEX NAME)

C20 H25 N3 O5 S MF

CA SR

STN Files: CA, CAPLUS LC

1: 117:211689 REFERENCE

ANSWER 486 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

143127-51-9 REGISTRY RN

Glycinamide, 1-(methylsulfonyl)-D-prolyl-L-phenylalanyl-L-arginyl-L-2-CN (CA INDEX NAME)

cyclohexyl- (9CI) PROTEIN SEQUENCE; STEREOSEARCH FS

C29 H46 N8 O6 S MF

SR CA

CA, CAPLUS STN Files: LC

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 117:151397

ANSWER 487 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

134019-79-7 REGISTRY

RN Glycinamide, 1-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1oxopropyl]amino]ethyl]sulfonyl]-L-prolyl-N-methyl-, (S)- (9CI) (CA INDEX CN NAME)

STEREOSEARCH FS

C18 H33 N5 O7 S MF

CA SR

BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX LC (*File contains numerically searchable property data)

1: 119:28570 REFERENCE

114:247732 2: REFERENCE

ANSWER 489 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

132686-26-1 REGISTRY RN

CN

naphthalenyl]sulfonyl]-L-prolyl]glycyl]glycyl]-L-glutaminyl]-L-glutaminyl]-

L-isoleucyl]- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

C42 H62 N10 O12 S MF

SR CA

CA, CAPLUS STN Files: LC

Absolute stereochemistry.

3 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 119:154667 REFERENCE

REFERENCE 2: 115:24938

3: 114:138651 REFERENCE

ANSWER 507 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

RN 109947-88-8 REGISTRY

Glycinamide, 1-[(4-methylphenyl)sulfonyl]-L-prolyl-N-[1-[[4-CN (aminoiminomethyl)phenyl]methyl]-2-(4-morpholinyl)-2-oxoethyl]-, monohydriodide (9CI) (CA INDEX NAME)

C28 H36 N6 O6 S . H I MF

SR

BEILSTEIN*, CA, CAPLUS, CASREACT LC STN Files: (*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 107:97096

ANSWER 510 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

RN

109947-85-5 REGISTRY Glycinamide, 1-[(4-methylphenyl)sulfonyl]-L-prolyl-N-[1-[[4-CN [imino(methylthio)methyl]phenyl]methyl]-2-(4-morpholinyl)-2-oxoethyl]-, monohydriodide (9CI) (CA INDEX NAME)

C29 H37 N5 O6 S2 . H I MF

SR

BEILSTEIN*, CA, CAPLUS, CASREACT LC STN Files: (*File contains numerically searchable property data)

1: 107:97096 REFERENCE

ANSWER 520 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

109947-75-3 REGISTRY

Phenylalanine, 4-cyano-N-[N-[1-[(4-methylphenyl)sulfonyl]-L-prolyl]glycyl]-RNCN (CA INDEX NAME) (9CI)

OTHER CA INDEX NAMES:

DL-Phenylalanine, 4-cyano-N-[N-[1-[(4-methylphenyl)sulfonyl]-L-CN prolyl]glycyl]-

STEREOSEARCH FS

C24 H26 N4 O6 S MF

SR CA BEILSTEIN*, CA, CAPLUS, CASREACT STN Files: LC (*File contains numerically searchable property data)

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 107:97096 REFERENCE

ANSWER 530 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

109630-18-4 REGISTRY

RN (aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-pyrrolidinyl)ethyl]-, (S)-CN (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C28 H36 N6 O5 S MF

CA SR

BEILSTEIN*, CA, CAPLUS STN Files: LC

(*File contains numerically searchable property data)

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 107:92532 REFERENCE

ANSWER 540 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

Phenylalaninamide, 1-(2-naphthalenylsulfonyl)-L-prolyl-N-butyl-4-cyano-RN CN (CA INDEX NAME) (9CI)

OTHER CA INDEX NAMES:

DL-Phenylalaninamide, 1-(2-naphthalenylsulfonyl)-L-prolyl-N-butyl-4-cyano-CN

STEREOSEARCH FS

C29 H32 N4 O4 S MF

SR CA

BEILSTEIN*, CA, CAPLUS, CASREACT STN Files: LC

(*File contains numerically searchable property data)

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

106:176825 1: REFERENCE

ANSWER 550 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

107994-30-9 REGISTRY

Benzenecarboximidothioic acid, 4-[3-(4-morpholinyl)-2-[[[1-(2-RN naphthalenylsulfonyl)-2-pyrrolidinyl]carbonyl]amino]-3-oxopropyl]-, methyl CN

ester, monohydriodide (9CI) (CA INDEX NAME)

C30 H34 N4 O5 S2 . H I MF

SR

STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT LÇ (*File contains numerically searchable property data)

$$\begin{array}{c} O \\ N \\ C \\ CH - CH_2 \\ \hline \\ NH \\ C \\ C \\ O \\ \end{array}$$

ΗI

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 106:176825 REFERENCE

L12 ANSWER 560 OF 629 REGISTRY COPYRIGHT 1999 ACS

107994-20-7 REGISTRY RN

2-Pyrrolidinecarboxamide, N-[1-[[4-(aminothioxomethyl)phenyl]methyl]-2-oxo-CN 2-(1-piperidinyl)ethyl]-1-(2-naphthalenylsulfonyl)- (9CI) (CA INDEX NAME)

3D CONCORD FS

C30 H34 N4 O4 S2 MF

SR CA

BEILSTEIN*, CA, CAPLUS, CASREACT LC STN Files: (*File contains numerically searchable property data)

REFERENCE 1: 106:176825

ANSWER 570 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

107994-10-5 REGISTRY RN

CN pyrrolidinyl)ethyl]-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

3D CONCORD FS

C26 H30 N4 O4 S MF

CASR

BEILSTEIN*, CA, CAPLUS, CASREACT STN Files: LC (*File contains numerically searchable property data)

$$C = 0$$
 $CH - CH_2$
 NH
 $C = 0$
 NH
 $C = 0$
 NH
 $C = 0$

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 106:176825 REFERENCE

ANSWER 580 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

98044-94-1 REGISTRY RN

 $L-Tyrosine, \ N-[1-[(7-nitro-2-dibenzofuranyl)sulfonyl]-L-prolyl]-, \ methyl$ CN(CA INDEX NAME) ester (9CI)

STEREOSEARCH FS

MF C27 H25 N3 O9 S SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

I REFERENCES IN FILE CAPLOS (1907 TO DATE

REFERENCE 1: 103:105304

L12 ANSWER 590 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 87650-93-9 REGISTRY

CN L-Serine, N-[1-(8-quinolinylsulfonyl)-L-prolyl]-, hydrazide (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C17 H21 N5 O5 S

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 99:176262

L12 ANSWER 600 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 74431-05-3 REGISTRY

CN L-Phenylalaninamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-N-[4-[(aminoiminomethyl)amino]-1-(chloroacetyl)butyl]-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

MF C33 H42 C1 N7 O5 S . C1 H

LC STN Files: CA, CAPLUS

CRN (71259-32-0)

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PAGE 2-A

HCl

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 93:163452 REFERENCE

ANSWER 610 OF 629 REGISTRY COPYRIGHT 1999 ACS L12

74260-41-6 REGISTRY

Glycinamide, 1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl-L-RN CN leucyl- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C25 H35 N5 O5 S MF

CA, CAPLUS LC STN Files:

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 93:40671 REFERENCE

L12 ANSWER 620 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 59191-13-8 REGISTRY

CN L-Proline, 1-[N-[N-[1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl]-L-leucyl]-N-methylglycyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C38 H49 N5 O7 S

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 88:23408

REFERENCE 2: 84:180643

L12 ANSWER 620 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 59191-13-8 REGISTRY

CN L-Proline, 1-[N-[N-[1-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-prolyl]-L-leucyl]-N-methylglycyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C38 H49 N5 O7 S

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 88:23408

REFERENCE 2: 84:180643

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L12 ANSWER 629 OF 629 REGISTRY COPYRIGHT 1999 ACS

RN 4172-31-0 REGISTRY

CN Glycine, N-[1-(p-tolylsulfonyl)-L-prolyl]-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C16 H22 N2 O5 S

LC STN Files: CA, CAOLD, CAPLUS

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 68:22261